

THE SOUTHERN PLANTER,

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.—*Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

FRANK: G. RUFFIN, EDITOR.

P. D. BERNARD, PROPRIETOR.

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No. 8.

For the Southern Planter.

GRAPE VINES DROPPING THEIR FRUIT —THE CROPS—REASON WHY WHEAT HEAVES.

Mr. Editor,—I have a small vineyard of six hundred vines, which bore fine fruit the third, fourth and fifth years after grafted upon wild stocks from the forest—they were well manured when planted; since which, I manured them with the vines pruned off, chopping them short and burying them near the roots, also with soap-suds and the washing of guano bags. The vines now cast their fruit when the berries are about the size of squirrel shot. I have pruned with one bud, two buds, and some vines not pruned at all; still some vines have not a bunch, and those that bear are scattering. Perhaps the ground is made too rich, or in working the vines I may put too much soil over the roots—they run extensively to vine. I will thank you to give this a place in the Southern Planter, inviting information of those who are competent to give me a remedy which will be thankfully received through the columns of the Planter or private communication.

The joint-worm has caused some damage to our wheat crop. This being the first year of their visitation, I fear they will be more numerous the next year, and cause great damage; still there is a good crop of wheat reaped and secured throughout the valley of the James river. Our oat crop is nearly worthless. The corn crop is backward, from the severe drought; but the fields are clear of grass, and with frequent showers a good average crop may be made yet. The tobacco prospect is gloomy indeed; under the most favorable seasons of weather and a late fall, more than a half crop cannot be expected. The chinch-bug is doing great damage to small corn that is not jointed. I will state a fact, as I believe, based upon many years observation, as regards the time of seeding wheat—say the two first weeks and the two last of October, and the two first weeks of November, the usual time of finishing seeding. The first division of October, the tap root forms readily, when the horizontal roots mostly perish. In the last division of that month it is generally cold and frosty, and the tap root being delayed in forming, the horizontal roots, as in their nature, give way, and the plant heaves out of the

ground, sometimes, sustained for a while by a single root but finally perishing. In November, the tap root does not put forth till warm weather ensues—still by some provision of nature or the season, the horizontal roots hold on and sustain the plants better against speling out than the last division of October; Captain Richard Sampson, a distinguished and practical farmer, first drew my attention to this subject. It is for you, Mr. Editor, or some of your intelligent readers to give the philosophy.

Very respectfully, yours,

CHS. YANCEY.

Buckingham County, Va.

For the Southern Planter.

BORROWING AND HIRING.

Mr. Editor,—I wish I could hire a wheat fan!

My little farm makes in this, my first year, only eighty-five bushels of wheat, and is not likely to make in any year, on the five or six acres, it affords for wheat, more than ninety or one hundred bushels, even with guano, and without the joint-worm and other plagues that be-devil our crops. So that to buy a wheat fan at twenty-five or thirty dollars "were wasteful and ridiculous excess." I tried to hire one; but my neighbors all said that was out of the question, and none would hire, though several were ready to lend. I did borrow from the nearest, and have cleaned out my little crop.

A thing as important to cultivate as wheat or corn, is a feeling of independence; and mine is wounded by having to borrow what is so very apt to be worsted both in the removal and in the use, as a wheat fan is; and what is of such regularly recurring necessity. I don't think such a thing ought to be borrowed or lent, unless in case of great urgency—far greater than existed in my case. And if the urgency recurs periodically, as once a month, or once a year, the wanter ought to buy or hire, and not to borrow. I should not like to lend a wheat fan if I had one, as I do not like to lend my horse and Jersey-wagon once a fortnight, for my pious neighbor Jobson to carry his wife and four children to meeting in—though I lend them with great pleasure to carry her

to see her sick mother, or to bring her mother to see her in sickness. Just so, I gladly lend the horse to ride for the doctor; but not to go every week to mill, or for a Sunday frolic. When my horse has been lame, and I could not hire another, I have walked twenty miles rather than borrow.

There are many farmers through the country, whose wheat crops are no larger than mine—so that they cannot afford to buy wheat fans. Some of them may not have as kind neighbors as I have, or they may have still sturdier notions of independence, so as to be galled even more than I am, by having to borrow. What a relief!—what a real bird-nest it would be to all such if they could hire fans at a reasonable price! I have known one (and only one) hired. It was at fifty cents a day, and hired to a woman—the most manlike woman, for honest industry and useful energy, that ever I knew of.

The not borrowing of wheat fans might be made the commencement of not borrowing a great many other things that ought not to be borrowed or lent. All over the country there are people who seem never to have heard what Poor Richard says, that “He who goes a borrowing, goes a sorrowing.”

A much more famous author than Poor Richard, gives it as the advice of a father to his son—

“Neither a borrower nor a lender be,
For loan oft loses both itself and friend;
And borrowing dulls the edge of husbandry.”

Machines to thresh out wheat are hired. Reaping machines will be hired when they get into common use, as they ought to do. Carriages are hired; and so are laborers of a thousand sorts. Why should not wheat fans?

A SMALL FARMER.

For the Southern Planter.

HOLE AND CORNER CLUB OF PRINCE GEORGE COUNTY.

It has been justly said that “he who makes two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together;” and to effect these things, so as to make the earth yield its fruits in due season and profitably, the forest must be felled and new land brought into cultivation, or worn lands must be improved by a judicious system of manuring, liming and culture.

No comparison can be made, as a matter of course, where crops are made upon *new land*, yet all good judges can ascertain if its owner has so improved such ground as to obtain more from it than could be obtained by the ordinary process of clearing and cultivation. But when

new land has been subjected to the plough and hoe, or worn lands have been taken up and improved, then skill, untiring industry and prudence will place their fortunate possessors before their neighbors as men of zeal in the good cause of agriculture, and a rich reward awaits those whose practice comes up to the standard of excellence. But unfortunately for the improvement of our good old State too many of her sons, men who ought to be ornaments to adorn, instead of drones, eating the bread of idleness, look upon agriculture as the merest drudgery, and disdain even the theory of agricultural improvement, as if their bright views of renown would be darkened and their high hopes of a brilliant future disappointed by coming into contact with an employment which feeds countless millions, and is beginning to find mental food for thousands of the talented of this and other countries. But so it is—and when the friends of improvement look forward they are almost disheartened at the work to be done before Virginia will take the first rank in improving her soil.

But for fear this communication may become too long, the undersigned will now present to the readers of the Planter an annual statement made by Mr. Charles Friend to the Hole and Corner Club of Prince George County, Virginia. This Club requires its members to make an annual statement embracing the number of acres of land improved, the number of acres in culture, and how many cleared, how many laborers are regularly employed on the farm, how many horses, mules and oxen are thus employed, and the amount of their crops, together with the amount expended for manures, lime, plaster, &c. before the successful candidate can receive the premium. Messrs. Friend, Jordan and Russell became competing candidates for the premium, hence the statement now submitted for publication. It may be proper to state that Mr. Friend took possession of his farm in 1839. In that year he expended \$3 46 in manures; this amount being the minimum; and in the year 1847, \$14 17, as the maximum amount in any one year: the whole amount expended between those years (and inclusive) being \$2243 83.

In 1839 he reaped 342 bushels wheat; in the year 1848 he reaped 2400 bushels. The attentive reader will perceive that the additional wheat in 1848 paid for all manures up to that period, and all intermediate crops were so much clear gain after deducting the minimum crop of 1839 from all succeeding ones.

The committee will now give the statement for 1852.

Amount of straw applied to land	42	
four-ox loads per acre,	-	12 acres.
Amount of putrescent manures	70	
one-horse loads per acre,	-	39 “
Amount of guano 150 lbs. per acre,	40	“
Amount of clover 1 gallon per acre,	80	“
Amount of plaster 1 bushel per acre,	30	“

Total, - 201 “

Number of acres in wheat, -	135
Number of acres in corn, -	100
Number of acres in oats, -	60
Number of acres in meadow, -	2
Total number of acres in culture, -	297
Number of acres land cleared, -	12
Number of laborers engaged on farm 7 men, 6 women, 6 boys—total -	19
Number of mules and horses, -	10
Number of oxen, -	3

Amount of Crops made 1852.

3309 12-60 bus. wheat at \$1 per bus.	\$3,909 20
2250 bus. corn at 60 cents per bus.	1,350 00
16,000 lbs. oats at \$1 per cwt.	160 00
6600 lbs. pork at 8 cents per lb.	528 00

Total, -	\$5,947 20
Expended for clover seed \$48 00	
Expended for plaster 10 50	
Expended for guano 143 00	
	201 50

Bal. after paying for manure, &c. \$5,745 70
Or \$302 40 per hand.

This statement is given to the readers of the Planter, hoping others belonging to Clubs will follow our example, and thus, though at a distance, let us compare results. If this report is approved of, others of a like character will follow, embracing the statements of Messrs. Jordan and Russell.

J. A. PETERSON,
JOHN H. BATTE, } *Committee.*
CORIOLANUS RUSSELL,

VIRGINIA STATE AGRICULTURAL SOCIETY.

At a meeting of the Executive Committee of the Virginia State Agricultural Society on Thursday, the 7th of July, 1853, present, P. St. Geo. Cocke, President; E. Ruffin, Harvie, Overton, Richardson, F. G. Ruffin and Williams.

The President reported to the Committee that John R. Edmunds, Esq. of Halifax, had accepted the invitation to deliver the annual address in November next.

Mr. Giles, Chairman of the Committee on Public Grounds, exhibited the plan of the City Engineer for the arrangement of the ground appropriated to the use of the Society at its first annual exhibition by the City of Richmond, and also the estimates of that officer for the buildings and fixtures necessary to be erected in order to adapt it to the uses of the Society; whereupon,

Resolved, That Messrs. P. St. George Cocke, Wm. H. Richardson and Ch. B.

8 II

Williams be a committee to confer with the Committee on Public Grounds, and that either of them is hereby authorized to act from time to time as occasion may require.

On motion,

Resolved, That the following subjects be added to the Schedule of Premiums, viz:

BRANCH II.

8th. For the best essay on the treatment and management of milch Cows the year through, a premium of - \$20

BRANCH X.

2d. To the first individual in Virginia who shall establish and maintain in successful operation for six months, a factory for tubular draining tiles, on the most approved plan, a premium of 30

BRANCH XII.

DOMESTIC MANUFACTURES.

1st. For the best Family Flour, a premium of - \$10

2d. For the best manufactured Tobacco, - \$10

3d. For the best pair Bed Blankets, 5

4th. For the best pair Servants' do. 5

5th. For the best piece Woollens, 5

6th. For best piece Cotton Cloth, 5

7th. For the best and greatest variety of shoes, - 5

8th. For the best and greatest variety of hats, - 5

9th. For the best and greatest variety of hardware, - 10

Resolved, That the Executive Committee now proceed to appoint the committees of award, to consist of five persons, on each of the various subjects embraced in the Schedule of Premiums heretofore adopted, and that if any person shall have a personal interest in any subject to be referred to the committee of which he shall be a member, he is requested to make it known to the Executive Committee, that his place may be filled by the appointment of another person.

BRANCH I.

EXPERIMENTS.

Judges—Wm. B. Harrison, Prince George, J. Ravenscroft Jones, Brunswick, Thomas Meaux, Amelia, B. J. Worsham, Prince Edward, Edwin W. Friend, Dinwiddie.

BRANCH II.

ESSAYS OR WRITTEN COMMUNICATIONS.

Judges—Jas. C. Bruce, Halifax C. H.
E. T. Tayloe, King George C. H.
M. R. H. Garnett, Essex,
Wm. S. Morton, Cumberland,
Benjamin Hallowell, Alexandria.

BRANCH III.

BEST FARMING IN VIRGINIA.

Judges—John R. Edmunds, Halifax C. H.
William Old, Powhatan C. H.
Jeremiah Morton, Culpeper,
Braxton Davenport, Jefferson,
Ed. Ruffin, Jr., Prince George.

BRANCH IV.

Judges—John R. Garnett, Henrico,
Samuel Mordecai, Richmond,
William L. Booker, Amelia,
J. Marshall McCue, Augusta,
William H. Roy, Matthews.

BRANCH V.—*Live Stock Exhibited.*

HORSES—THOROUGHBRED.

Judges—Wm. H. E. Merritt, Brunswick,
John M. Botts, Henrico,
Wm. W. Crump, Richmond,
Wyatt Cardwell, Charlotte C. H.
George Booker, Hampton,
John White, Pittsylvania,
Dr. Abner Crump, Powhatan,
J. Parke Corbin, Fredericksburg.

QUICK DRAFT AND SADDLE HORSES.

Judges—Gen. John H. Cocke, Fluvanna,
R. H. Delany, Fauquier,
Gen. J. B. Harvie, Henrico,
Robert Edmond, Richmond,
Peter Boisseau, Amelia,
Richard J. Gaines, Charlotte.

HEAVY DRAFT HORSES.

Judges—James M. Ranson, Lexington,
Robert Kyle, Rockingham,
Michael Harman, Staunton,
Hillary Harris, Powhatan,
Reuben Moore, Rockingham.

MULES AND JACKS.

Judges—Th. M. Bondurant, Buckingham,
R. M. Bridges, Caroline,
D. W. Haxall, Charles City,
S. Coleman, Sr., Spottsylvania,
William Irby, Lunenburg.

CATTLE.

Short Horns and Herefords.

Judges—Gen. P. H. Steinbergen, Mason,
Allen T. Caperton, Monroe,
Lewis Bailey Fairfax,
Dr. Wm. I. Dupuy, Petersburg,
Thomas A. Hardy, Norfolk,
Lewis Steenrod, Wheeling.

Devons and Alderneys.

Judges—John Hill Carter, Prince William,
Henry Massie, Orange,
Dr. Cyrus H. McCormick, Clarke,
Dr. Williamson, Shenandoah,
A. A. Matthews, Wytheville.

Ayrshires and Holsteins.

Judges—Edw'd Marshall, Fauquier,
Andrew Maxwell, Powhatan,
William B. Sydnor, Hanover,
Robert Grattan, Rockingham,
Andrew Nichol, Petersburg.

Natives or Grades.

Judges—James Newman, Gordonsville,
S. B. Finley, Augusta,
J. M. Trevillian, Goochland,
Ed. C. Turner, Fauquier,
Andrew Beirne, Monroe.

Working Oxen.

Judges—John Willis, Orange C. H.
C. H. Hunton, Prince William,
Dr. John W. Gantt, Scottsville,
Robert Hubbard, Buckingham,
John H. Steger, Powhatan.

Fat Cattle.

Judges—John A. Herring, Rockingham,
John Patteson, Fauquier,
Ro. L. Wright, Loudoun,
John Marshall, Culpeper,
Jacob Shook, Richmond.

SHEEP.

Fine Wools and Middle Wools.

Judges—J. M. Morson, Goochland,
J. W. Ware, Clarke,
Samuel F. Christian, Augusta,
Dr. H. W. Chapline, Wheeling,
Edward Cunningham, Powhatan.

Long Wools.

Judges—Dr. Wm. L. Wight, Goochland,
William Garth, Albemarle,
Clayton G. Coleman, Louisa,
Dr. W. D. McGuire, Clarke,
Noble S. Braden, Loudoun.

Natives or Mixed Blood.

Judges—Wm. McCoy, Franklin, Pendleton,
W. G. Crenshaw, Orange C. H.
S. M'D. Reid, Lexington,
Rev. D. M. Wharton, Spottsylvania.
Province McCormick, Clarke.

Imported Sheep.

Judges—Raleigh Colston, Albemarle,
N. Loughborough, Fauquier,
Robert Allen, Bedford,
Francis Peters, Martinsburg,
R. W. Baylor, Jefferson.

SWINE.

Judges—R. W. N. Noland, Albemarle,
Rev. W. Timberlake, Albemarle,
Lewis D. Crenshaw, Henrico,
N. L. Paleske, Henrico,
Col. W. A. Bell, Staunton.

PREMIUM ANIMALS.

Judges—Col. H. B. Powell, Loudoun,
John B. A. Nadenbousch, Martinsburg,
David Kent, Montgomery,
Ben'j'n Wood, Albemarle,
Dr. A. T. B. Merritt, Richmond.

POULTRY.

Judges—Wm. C. Scott, Powhatan C. H.
Chastain White, Hanover,
J. Corbin Burton, Henrico,
O. A. Strecker, Richmond,
Erasmus Powell, Goochland.

BRANCH VI.

AGRICULTURAL IMPLEMENTS.

Class No. 1.

Judges—Thomas J. Randolph, Albemarle,
Wm. Townes, Mecklenburg,
Dr. John B. Harvie, Powhatan,
Waller Holliday, Spottsylvania,
Josiah Burruss, King William.

Class No. 2.

Judges—Dr. Wm. F. Gaines, Hanover,
Wilson Winfree, Powhatan,
Charles Marx, Chesterfield,
George Watt, Richmond,
William Palmer, Richmond.

Class No. 3.

Judges—Wm. W. Minor, Albemarle,
Wm. Allen, Cabin Point, Surry,
F. Lewis Marshall, Fauquier,
William C. Knight, Nottoway,
Ro. M. Taylor, Henrico.

Class No. 4.

Judges—Thomas R. Joynes, Accomack,
Wm. B. Stanard, Goochland,
Henry Brazeal, Amelia,
Wm. Y. Downman, Lancaster,
Francis Nelson, New Kent.

Class No. 5.

Judges—Dr. E. P. White, Caroline,
James Cornick, Norfolk,
James W. Foster, Fauquier,
E. H. Herbert, Princess Anne,
Ro. J. Dunn, Petersburg.

AGRICULTURAL STEAM ENGINE.

Judges—Ro. B. Bolling, Petersburg,
Jos. R. Anderson, Richmond,
Thatcher Perkins, Alexandria,
John Haw, Hanover,
Thomas Samson, Richmond.

MOST EXTENSIVE AND VALUABLE COLLECTION, &C.

Judges—Ex-Pres't Jno. Tyler, Chas. City,
J. C. Cabell, Nelson,
Whitemarsh B. Seabrook,
Charleston, S. C.
Rich'd H. Stuart, King George,
Hill Carter, Charles City,
Henry Dangerfield, Alexandria.

PLOUGHING MATCH AND TRIAL OF PLOUGHS.

Judges—Richard Sampson, Goochland,
Wm. Gilmer, Albemarle,
John A. Selden, Charles City,
Charles Selden, Powhatan,
B. F. Dew, King & Queen.

WHEAT REAPER AND MOWER.

Judges—Dr. Wm. F. Gaines, Hanover,
Dr. John R. Garnett, Henrico,
Richard Irby, Nottoway,
Ed. O. Watkins, Chesterfield,
Ro. M. Taylor, Henrico,
Samuel Ball, do.
—— Baylor, Sandy Point.

BRANCH VII.

FRUITS AND FRUIT TREES.

Judges—Tucker Coles, Albemarle,
Henry B. Jones, Rockbridge,
Robert L. Wright, Loudon,
Charles Friend, Prince George,
H. C. Williams, Fairfax.

FLOWERS.

Judges—T. Ritchie, Sr., Washington City,
Gustavus A. Myers, Richmond,
James Dunlop, "
James Gray, "
Thomas T. Giles, "

VEGETABLES.

Judges—Thomas B. Irwin, Norfolk,
Richard Walke, "
Dr. M. Burton, Richmond,
Wm. A. Page, Petersburg,
E. A. Marks, Prince George.

BRANCH VIII.

DAIRY AND HONERY.

Judges—Peter S. Roler, Rockingham,
James M. Bowen, Albemarle,
Bolling W. Haxall, Richmond,
Dr. R. R. Barton, Rockbridge,
George Whitlocke, Chesterfield.

BACON HAMS.

Judges—J. R. Todd, Smithfield,
M. M. R. Todd, Norfolk,
Blair Burwell, Powhatan,
John Womble, Richmond,
Edwin Burton, Sen., Richmond.

HOUSEHOLD MANUFACTURES.

Judges—Dr. John R. Woods, Albemarle,
James A. Cochran, Augusta,
Andrew Keyser, Page,
James M. Harris, Powhatan,
Thomas D. Quarles, Richmond.

HOUSEHOLD IMPLEMENTS.

Judges—J. B. Smith, Louisa,
E. B. Spence, Richmond,
William Beers, "
Hiram M. Smith, "
James Pae, "

BRANCH IX.

Judges—N. Francis Cabell, Nelson,
Henry E. Watkins, Pr. Edward,
Gov'r J. H. Hammond, S. Car.,
William P. Taylor, Caroline,
James C. Bruce, Halifax,
Wm. B. Harrison, Prince Geo.,
Thos. J. Randolph, Albemarle,
Gen. P. H. Steinbergen, Mason,
B. Johnson Barbour, Orange,
R. M. T. Hunter, Essex,
Com. T. Ap Cat. Jones, Fairfax,
Hugh M. Nelson, Clarke,
Col. Thos. C. Swann, Baltimore,
Fielding D. Piggott, James City.

BRANCH X.

Judges—John B. Harvie, Powhatan,
R'd H. Cunningham, Culpeper,
James M. Smith, Henry C. H.,
Dr. Cary C. Cocke, Fluvanna,
Wm. Radford, Jr., Bedford,
Maj. Wm. Gilham, Rockbridge,
Gov. J. H. Hammond, Barnwell,
South Carolina.

BRANCH XI.

Judges—Dr. Socrates Maupin, University
of Virginia, Charlottesville,
Rev. Geo. D. Armstrong, Norfolk,
Robert W. Tomlin, King Wm.,
Julian C. Ruffin, Prince George.

At a meeting of the Executive Committee of the Virginia State Agricultural Society on Friday evening, the 29th of July, 1853, present, Philip St. George Cocke, President; E. Ruffin, F. G. Ruffin, Harvie, Boulware, Booth, Irby, Overton, Peyton and Williams.

Resolved, That the following subject be added to the schedule of premiums, viz:

BRANCH VI.

AGRICULTURAL IMPLEMENTS.

Class 1st. Specification 10th.

For the best Ditching Machine, a premium of - - - \$30

Resolved, That in all cases the parties entitled to premiums, may receive them according to their own election, either in money or its equivalent in silver plate, bearing an inscription representing the particular subject for which the same shall have been awarded.

Resolved, That Messrs. W. Boulware, F. G. Ruffin and L. E. Harvie are hereby appointed a committee to wait on the President of the United States to request the aid of the State Department in inducing the Peruvian Government to abandon the monopoly in the trade in guano.

Resolved, That the President of the Society be added to the above committee.

Resolved, That the Corresponding Secretary address a circular letter to the judges who have been appointed to award premiums, and request an early answer, that in case of inability to attend, vacancies occurring may be supplied.

Resolved, That our Secretary be instructed to acknowledge the receipt of the volume of Transactions of the Indiana State Board of Agriculture, and to express to said Board the grateful acknowledgements of this committee in behalf of our Society; and that he be further instructed to assure the said Board of our disposition to reciprocate as soon as a volume of our transactions is published.

Resolved, That the Corresponding Secretary be requested to obtain from the New York State Agricultural Society a full description of the points which are regarded as constituting the standard of excellence in adjudging premiums on cattle.

Resolved, That Messrs. Sam'l Mordecai, Edmund Ruffin, Robert Gwathmey, Chas. B. Williams and Socrates Maupin, M. D., are hereby appointed a committee to investigate and report to the Executive Committee, upon the operation and effects of the inspection laws of this Commonwealth upon the agricultural and general interests of Virginia.

Resolved, That Col. C. Q. Tompkins is hereby appointed Chief Marshal of the Society, with discretionary power to call to his aid as many deputies as he may find necessary to give complete efficiency to his department in securing a strict observance of the rules and regulations, and in promoting the orderly and systematic dispatch of business at the Exhibition to be held in November next.

CH. B. WILLIAMS, *Rec. Sec'ry.*

HORSES—CAREFUL USE OF, &c.

An acquaintance lost his horse, a few days ago, in a manner that would suggest an habitual caution in driving. The horse, a valuable one, well kept, in good spirits, and in perfect health, was taken from the stable and driven. He had ascended a long and hard hill within the first mile of driving, and as soon as the summit was reached, the driver, as is the habit of many, touched him with the whip; he sprang, stopped, staggered, and fell, and by the time the driver could alight from the carriage, he was dead. An examination showed that a large blood-vessel near the heart had been ruptured. No appearance of disease could be detected.

Now there would be in the same circumstances always a danger of a similar occurrence. Especially if the stomach should happen to be filled, as it would be directly after a full meal.

Every increase of the muscular action of any animal produces an increase in the rapidity of the circulation of the blood. This arises from two causes, one mechanical, as the compression of the blood-vessels by the muscular contraction; and one physical, as the necessity for the more rapid purification of the blood in a period of exercise.

Physiology teaches that every muscular action is attended with a waste of the material of the body, as in galvanic action when zinc is used in the circuit, at each period of action, portions of the zinc are destroyed. This waste portion of the animal solid goes into the blood and must be discharged mainly from the blood in the lungs. The more violent the muscular action, the more of this waste matter is given to the blood, and this once loaded with it is useless until it has been purified in the lungs. Consequently, the blood is sent to the lungs in a vastly increased current, and the breathing becomes more rapid to introduce larger portions of air to the blood in the lungs. Here, then, are increased quantities of air in the lungs, at the same time, producing a state of fulness, if the lungs have full play. But, if the stomach is full and pressing upon the cavity of the lungs, it is easy to see that a great pressure of blood in the lungs, and the great cavities of the heart must take place. Almost every person has experienced the sharp pain and distress produced by this state of things after having run a little way, sharply, not being accustomed to the exercise. It is not difficult to see how, in this crowded state of the vessels, a sudden and powerful muscular exertion should cause a rupture of some one of the distended vessels.

When a rupture of a blood-vessel does not result, oftentimes so much injury is done to the delicate membrane of the air cells as to produce an incurable heaves.

We were early taught this lesson of care in driving, by an old stage proprietor of whom we once had a pair of horses for a journey.

"The only caution," said he, "I care to give you about driving, is never to start quick from the top of a hill you have just ascended. If you do, you may spoil the horses' wind."—*Granite Farmer.*

From the Ohio Cultivator.

SOAP MAKING.

D. W. C. B. of Miami county, inquires how to manage in making good soap, as he has had bad "luck" in this operation. We do not believe there is any more *luck* in making soap than in making rail fence. The only requisite is to know how.—The following, from a correspondent in the third volume of the Ohio Cultivator, is such advice as we should give in the matter, premising that the ashes, while in gathering, should be kept dry. The presence of a small quantity of salt in the grease will not prevent its union with the lye:

"Put lime in the bottom of your leach; say one bushel for ten of ashes; (if you saturate your ashes with hot water two or three days before running off your lye, you will obtain the strength much better;) run off your lye, and have it clean, and strong enough to bear an egg the bigness of a dime above the surface; put it into your barrel or tub cold, and for one barrel melt and turn in about thirty pounds of clean grease or lard; stir it well together, and stir frequently for three or four days, and you will have 'nice' white pleasant smelling soap, one gallon of which will be worth more than two gallons of the black rank soap made by boiling lye, bones, rinds and scraps all together.

CYNTHIA."

HIGH PRICES FOR MULES IN KENTUCKY.

The *Western Citizen* reports the following sales of mules at the May Court, in Bourbon county, Kentucky: 39 mules at \$107; 24 do. at \$70 25; 46 do. at \$80 50; 42 do. at \$76 76; 22 do. at \$80; 75 do. at \$79; 7 do. at \$78 50; 23 do. at \$65 75; 20 do. at \$71 90; 49 do. at \$88 75; 9 do. at \$98 75; 63 do. at 100 5; 18 do. at \$103; 45 do. at \$99 75; 69 do. at \$100; 46 do. at \$88; 1 do. at \$111 50. At these prices, the raising of mules would appear to be a profitable business.

From the Boston Cultivator.

ACTION OF GUANO.

The following interesting and valuable article has been received in reply to a request for information respecting the action of guano. In respect to the effect of mixing this substance with plaster, it will be seen that the writer coincides with the conclusion expressed by T. S. Pleasants, Esq. in a late number of this paper.—[Eds.]

I may remark in the first place that I am aware that a difference is apparent in the action of guano upon different soils, or in different sections of country, dependent, perhaps, often upon a difference in the soils themselves; but from facts that have come under my own observation, I am entirely convinced that this is not always the cause. For example, I have myself, for the purpose of experimenting, sowed guano broadcast in the spring of the year, upon clover, and left it exposed upon the surface, and although it was raining at the time, I have seen no effect from it. I have also applied it on wheat by harrowing it in with the wheat after both were spread broadcast upon the surface, and observed a beneficial result to the wheat crop, but very far less than when it has been ploughed in previous to sowing the wheat. In the former case, but little, if any, advantage was derived from the guano, to succeeding crops; whereas, during the whole of my experience, a marked and important improvement in the land has resulted.

Thus upon the same kind of land we find very different results dependent upon the mode of application. I have, however, heard of instances where it has been harrowed in with the wheat, and a better effect realized than I have observed myself. May not this have depended upon other causes than the mode of application? For instance, continued and plentiful rains may have fallen soon after, sufficient to carry the ammonia, &c. into, and incorporate it more effectually with the soil, than at other times. Also, the state of the weather after the rains may have been such (possibly unobserved by the farmer at the time, as connected with his operations,) as to secure the most favorable action under the circumstances.

In order to show how these different results are sometimes manifested, I will further state that some fourteen or fifteen years ago, I limed a portion of one of my fields, carefully, at the different rates of fifty, seventy-five and one hundred bushels

to the acre. In the autumn of 1845, I sowed this field in wheat, giving it a dressing of two hundred and seventy pounds of guano to the acre. The average yield was within a fraction of twenty bushels per acre. Early in the spring, the wheat on the limed portion of the land was of a darker green than the other; but at harvest it was evident that the wheat was, by several bushels, better per acre where there had been no lime. In 1849, this same field was sown in wheat, and received two hundred pounds guano per acre. In 1850, it was again sown in wheat, and perhaps a little more than two hundred pounds guano applied per acre. Each time ploughed in before the wheat was sowed. Both these last crops exceeded that sown in 1845, but the difference between the wheat on the limed portion of the field and the other was still greater than in the first instance; that where no lime had been used being much the best. While these crops were being grown, a friend of mine, within six miles of me, purchased an old worn-out field for ten dollars per acre, ploughed it in the fall, and spread thirty bushels of lime per acre after the ploughing. In the following spring, he sowed (I think) between two hundred and three hundred pounds guano per acre, and ploughed both in together, planted it in corn, and the measured product was forty-five bushels per acre, for which he was offered in cash more money than had been expended in the purchase of land, lime, and guano too. I am at a loss how to account for these different results in any other way than by supposing there must be some difference in the constitution of the soils, which neither he nor I have detected. Here, perhaps, a good practical chemist might be useful to us. The only distinction we are able to make is, that there is much isinglass [mica] in his soil, and none in mine. Both resting upon the same kind of yellow clay and rather loamy subsoils.

Secondly—So far as my knowledge and observation extend, guano acts more satisfactorily on land "containing a considerable proportion of clay, such as may be called a clayey loam" subsoil. And even upon our moist, stiff, white clay low grounds (sometimes found here) its effects are very striking.

Thirdly—"What have been the comparative results in the application of guano mixed with plaster, and that which was applied alone, or mixed with any other substance?" In answer to this interrogatory,

I can state that the experiments reported through the columns of the "American Farmer," by "Caleb Stabler," are fully to be relied on, so far as they pertain to, his own practice and observation, and to which alone he intended them to apply. I know him well, and can vouch for his integrity as a man, and his skill and success as a farmer. His soil is much the same in appearance as that on which the lime and guano were combined in their application to the corn crop. On the other hand, I have three times used guano combined with a portion of plaster, in the proportions of a peck or half bushel of plaster to a bushel of guano, without being able to discover any difference in the effect. But in the fall of 1849, I took up an old and exceedingly poor field, with a view to its improvement—ploughed it thoroughly and planted it in corn the following spring, without a prospect of being remunerated by the crop for the expense of cultivation, and was not disappointed in my calculations. I, however, reserved nearly one acre for potatoes. This was treated to forty-four large ox-cart loads of manure from the stables and barn-yard, and constituted so heavy a dressing that in ploughing it in (in the spring) several men with rakes were necessarily employed in raking the manure into the furrow before the plough, in order to secure its being covered. The ground was then harrowed, rolled and chequered into squares about two feet each way—a moderate handful of leached ashes dropped in each chequer, and a cutting of Irish potato placed on it and covered with the hoe. The roller was again passed over it, and one and a half bushels of plaster sown broadcast. The potatoes came up well, and were well cultivated, though the growth throughout a good season, as regards moisture and temperature, was very inferior. The crop when gathered, fell short of fifty bushels of indifferent potatoes.

After they were dug, the ground was put in wheat, two hundred pounds of guano being first ploughed in. On two sides of this potato lot, and adjoining it, at the same time, I sowed strips of wheat twenty-one feet wide, applying to this, at the rate of three hundred pounds of guano per acre, as nearly as I could estimate the quantity. The product was forty-one bushels, and a few pounds of wheat, from, say rather less than an acre and a half.

But it was evident to all who saw it, that the best of the wheat grew on the strips added to the potato ground, and on

which no manure of any kind had been used except the guano, and which was so very poor that it probably had not the previous season produced five bushels of corn per acre.

The balance of this field lay idle till fall, when the *whole* was well prepared and sown in wheat, with perhaps a little over two hundred and fifty pounds of guano per acre. As the crop matured, to the surprise of all who viewed it, that portion of the field cultivated in potatoes, while the other was in corn, certainly did not produce half the amount of wheat grown upon the same quantity of land in any other portion of the field. In that crop, the failure was as signal as it had been with the potatoes. While engaged in sowing and ploughing in the guano, preparatory for this crop of wheat, I carefully mixed with the guano designed for a small strip across a portion of the field, at the rate of half a bushel of plaster to one bushel of the guano, and sowed them together. Early the following spring, our "Agricultural Club" met at my house, and while progressing with the usual examination of my farming operations, their attention was directed to the previous treatment and present condition of the different portions of this wheat field. The striking contrast before them (the strip on which the guano was combined with plaster, being much inferior to that on either side of it,) became the subject of general remark, until at length one of our number observed that the different effects produced were probably owing to the combination of plaster with the guano and other manure, having had the effect to 'fix' the ammonia contained in both, to such an extent as to place them out of the reach of the growing crops. I can account for this in no other way.

This field was laid down in clover, and about midsummer, during the past year, half a bushel of plaster per acre was sown, and now the clover is looking well all over it. Thou wilt, perhaps, query why, with the evidence before me, have I sowed plaster on this (now) clover field? I will reply, by stating that we frequently find here that land on which plaster appears to have little or no effect while it is very poor, is much benefited by its application after it has undergone improvement; and I am also able to state, that six years ago I gave a field two hundred pounds of guano per acre, for corn. The year following sowed it in oats, and received fair crops of both in return. After the oats came off,

the field was broken up, harrowed and rolled, then two hundred pounds of guano, and three bushels of finely pulverized bone to the acre, ploughed in, the roller passed over it, and one and a half bushels Mediterranean wheat per acre, put in with a drill. In the following spring, six quarts of clover seed per acre sowed. This field gave twenty-seven bushels and twelve pounds of wheat per acre; and the year following, so large a growth of clover that it fell all over the field. In the fall of that year, this twelve acre field yielded seventeen and a half bushels clover seed. The year following, (which was last year) early in the spring it was dressed with three pecks of plaster per acre, and gave a good crop of clover hay, though not so abundant as the first; and last fall, the same land yielded twenty-two and a half bushels of clover seed. I now expect to give it another dressing of plaster this spring, and shall probably again cut both hay and seed from it the coming summer. This field was poor previous to the applications of manure above mentioned. It is now completely renovated.

By the foregoing hasty sketch, thou wilt perceive that I have arrived at the conclusion that on my land it is not best to apply guano where lime has been previously used, nor to mix plaster with guano or barn-yard or stable manure at the time of using them; but, after the lapse of a year or two, or perhaps more, the plaster may be resorted to as an auxiliary with success. I may also add, that we have invariably found that guano acts well when combined with manure from the cow-yard and stables, as well as with ground bones.

THOS. P. STABLER.

Brookville, Montgomery Co., Md.

"ENGLISH BLUE GRASS," OR MEADOW FESCUE [OR RANDALL GRASS,] AND KENTUCKY BLUE GRASS.

During the past two years frequent mention has been made in this paper of a species of grass known in some parts of Virginia, and from there introduced into Indiana and Ohio, by the name of "English Blue Grass," and sometimes as Randall grass. The former of these two names appears to have been given to this grass by the late J. S. Skinner, whose attention was called to it when travelling in Virginia; but with what propriety we cannot

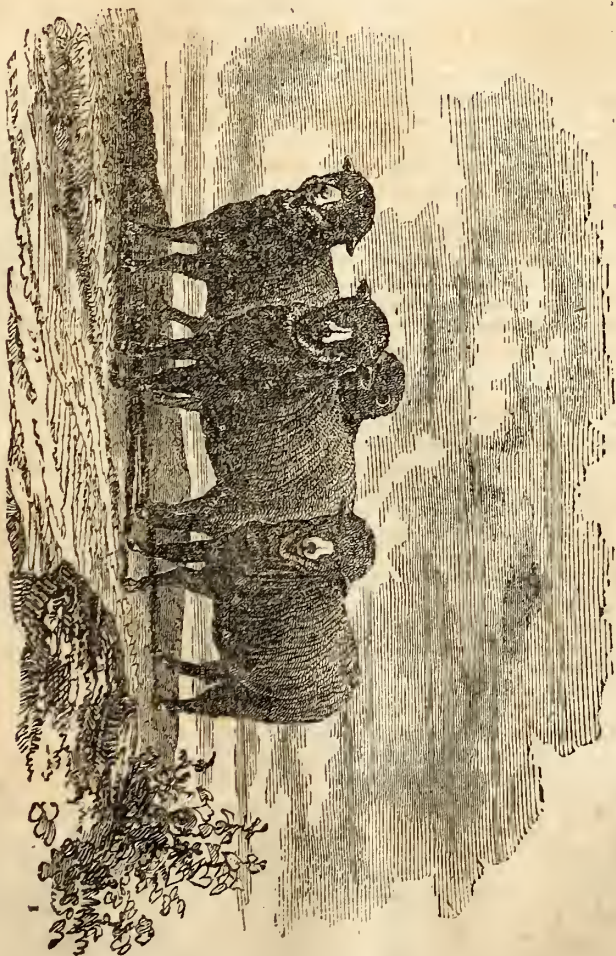
discover, inasmuch as there is no grass known by the name of "Blue Grass" in England, unless it may have been because it is an English grass, and somewhat resembles in growth and quality the Blue grass of Kentucky. (See Ohio Cultivator, Vol. VII. page 183.)

Such favorable reports were given by several of our correspondents in regard to this grass that a number of our subscribers were anxious to obtain the seed; accordingly we sent for and obtained quite a number of bushels, both in 1851 and 1852, and a large number of Ohio farmers have now the article on their lands, and will in a year or two be able to testify as to its value; and when they do, we predict that not many farmers who have suitable land and desire permanent pasture, will long be without it.

What is the true name of this valuable grass? is the first question that arose in our mind on reading the account given of it by our correspondent in 1851, and no one could be found to give us an answer. On receiving a few grains of the seed we at first thought it was Rye grass, but a few broken fragments of the heads caused doubts on that point. In 1852 a few entire heads were sent to us (with stems and culms;) one of these we sent to friends at Albany, and it was pronounced a species of rye grass (*Lolium*) after consulting an intelligent English farmer; another was sent to one of the first botanists in the Union, and he expressed to us the belief that it was the *Festuca loliacea* (or rye-grass-like fescue) of the English—but as this species was described as bearing very little seed, he had some doubt on this point, inasmuch as our Virginia species produces seed in abundance. Another specimen we sent to Mr. Peter Lawson, the great seedsman of Edinburgh, Scotland, and author of several works on grasses, grains, &c. and in due time he wrote us unhesitatingly that the grass in question is the *Festuca pratensis* of botanists—the "Meadow Fescue" of English farmers; and this is esteemed the best grass known for permanent pasture on good strong soils. We had seen the "meadow fescue" growing abundantly in England, but not as large, and with spikes or heads as long and compact as those sent us from Indiana, in which respect our species agrees better with *Festuca elatior*, only that it is infertile; still we presume that Mr. Lawson is correct, as several writers state that the genus is quite variable, as affected by soil, climate, &c.;

and it is claimed by some that improved varieties have been produced by cultivation, hence we are inclined to the belief that this grass thrives better here than in England, or that ours is a different and larger growing fertile variety.—*Ohio Cult.*

From the Wool Grower and Stock Register.



SILESIA MERINO EWES.

IMPORTED BY MR. CAMPBELL.

Mr. Editor,—As your columns are always open to those farmers who are willing to throw in their "mite," in order to aid in the great improvements of the day, and especially, that portion of them engaged in wool growing, I send you an engraving of a group of Silesian Merino

ewes, which were purchased in Prussian Silesia, in April, 1851, and landed in New York the following May. These sheep are descendants from the far-famed Infantardo's flock, so much admired in Spain, some fifty years ago, and as far as my knowledge extends, they are now the only

flock of this variety that have been preserved in their pure state, to the present time.

The proprietor of this flock, imported the original stock from Spain, in 1811, and since that time has given his own personal attention to his sheep, and by this means has been able to still further improve them, especially as regards the quality of wool, which has been increased in fineness, without diminishing the weight of fleece. It is believed that very few, if any, sheep in the country at the present day, will produce more pounds of wool, according to cost of keeping, than the Silesian Merino. For the shape of the sheep, I will refer you to the engraving, as it is a faithful copy of a daguerreotype; and to convince you of their hardiness and strong constitution, I need only to refer you to the circumstance, that one ewe of this flock lived to be twenty-one years old. The skin of this sheep was carefully stuffed and placed in the sheep-fold, where it now stands with quite a life-like appearance. I mention this fact merely to show that the gentleman takes an interest in his flock. Had he followed the example of other sheep breeders and given the management of his flock to some other person, as is almost the universal case in Germany, we could hardly expect to see so perfect looking animals as those above represented. It is altogether idle for one to expect that he can succeed in breeding a valuable flock of sheep, without devoting his own time and undivided attention to the business.

Probably most of your readers are already aware, that nearly all of the sheep of Germany are of the Saxon blood, and in every respect very unfit for the American wool grower. But notwithstanding most Saxon sheep are of an inferior quality there are a few flocks that are really fine animals, producing very heavy and fine fleeces, and in only one point are they inferior to our best Merinos—in fact the best Saxons had every appearance of Merinos, excepting that the wool on the belly was short and thin. In other respects they were very good. I had the pleasure of seeing only one good lot of Saxon sheep while in Germany, but it was not a difficult thing to account for their superiority over others of the same blood. The proprietor, like the Silesian gentleman, had made sheep breeding his favorite employment, and to this alone must be attributed the success of his labor.

It is believed by a large portion of wool

growers, that in proportion as the wool grows finer, the fleece becomes lighter. But I have long entertained a different opinion. I am fully satisfied that as much fine wool can be produced from a given amount of keeping, as that of a coarse grade.

In proof of this fact, allow me to mention the progress I have made in breeding my Spanish flock. When I commenced the wool growing business, I purchased a flock of Merinos that sheared an average of little above three pounds, (at that time considered to be a good yield,) while some particular individuals of the flock sheared from four to five pounds each, of equally fine wool. I determined to bring up the whole flock to five pounds, at least. With this view of the subject, my bucks were selected without regard to time or expense, and all ewes that did not come up to a certain mark were rejected at once. This flock, the present season, sheared an average of five and a half pounds of well washed wool, for which I have recently refused the offer of forty-eight cents per pound, as I have not been in the habit of selling my wool for less than fifty cents per pound. I think the present flattering prospects will warrant the old price.

My Silesian ewes suckled lambs during the winter, which every one knows will lessen the fleece at least one pound per head. They were thoroughly washed and sheared as soon as properly dry, shearing an average of four pounds five and a half ounces per head. Bucks of this variety, when fully grown, will shear from six to ten pounds of well washed wool.

GEO. CAMPBELL.

West Westminster, Vt., Sept. 1852.

GENERAL WASHINGTON'S MULES.

CUSTIS'S RECOLLECTIONS.

Upon Washington's first retirement in 1783, he became convinced of the defective nature of the working animals employed in the agriculture of the Southern States, and set about remedying the evil by the introduction of mules instead of horses—the mule being found to live longer, be less liable to diseases, and require less food, and in every respect to be more valuable and economical than the horse in the agricultural labor of the Southern States. Up to 1783, scarcely any mules were to be found in the American Con-

federation; a few had been imported from the West Indies, but they were of diminutive size and of little value. So soon as the views on this subject of the illustrious farmer of Mount Vernon were known abroad, he received a present from the King of Spain of a jack and two jennies, selected from the royal stud at Madrid. The jack, called the Royal Gift, was sixteen hands high, of a grey color, heavily made, and of sluggish disposition. At the same time the Marquis de Lafayette sent out a jack and jennies from the Island of Malta; this jack, called the Knight of Malta, was a superb animal, black color, with the form of a stag and the ferocity of a tiger. Washington availed himself of the best qualities of the two jacks, by crossing the breeds, and hence obtained a favorite jack, called Compound, which animal united the size and strength of the Gift with the high courage and activity of the Knight. The jacks arrived at Mount Vernon, if we mistake not, early in 1788. The General bred some very superior mules from his coach mares, sending them from Philadelphia for the purpose. In a few years the estate of Mount Vernon became stocked with mules of a superior order, rising to the height of sixteen hands, and of great power and usefulness—one wagon team of four mules selling at the sale of the General's effects for \$800.

In no portion of Washington's various labors and improvements in agriculture was he so particularly entitled to be hailed as a public benefactor as in the introduction of mules in farming labor; those animals being, at this time, almost exclusively used for farming purposes in the Southern States.—*National Intelligencer*.

For the Southern Planter.

BURDENS OF THE FENCE LAW.

Mr. Editor,—I have read, with deep interest, the able report of the Brunswick Agricultural Society, through their committee, upon the fence law. I believe that a large majority of intelligent citizens in Eastern Virginia are in favor not only of a modification of the fence law, but of its actual repeal, and it is a surprising thing that any intelligent man should be found to favor so unjust a law. We, of course, might expect to see the man who has followed all his life in the track of his father, who also pursued that of his father, and so on back some century or more; the man who laughs at all improvement and denounces every thing new as a humbug; we, I say, might ex-

pect to find such a man opposed to the repeal of the fence laws, as well as every thing else that tends towards improvement; but for intelligent men to favor the actual tax of ten per cent. of all the labor performed in the State which is required by this most unjust and burdensome law, and that for no purpose except the poor pitiful privilege of the *range*, as it is called, is a thing too mysterious to be easily accounted for. The range! What is the range? It might, with more propriety, be called the *starve*. Now, it is true, that cattle do get a scanty subsistence from the common for about five or six months in the year; and for this scanty subsistence we are taxed to the amount of ten per cent. of all the labor we perform. Thus the farmer who works ten hands, worth each a hundred dollars, pays one hundred dollars for the privilege of his cattle grazing other people's lands and other people's cattle grazing his land. Besides this, a boy and a horse is to be sent every evening to drive these cattle home to be milked, otherwise they are missing more than half of their time. Suppose the farmer who works a force equal to that above indicated, should keep fifteen head of cattle, which is too many, but I will suppose that number to be kept, he then pays, in the way of fencing, one hundred dollars for grazing these cattle six months, which is \$6 66 a head. Again: two of these cattle are work oxen that might be very well spared but for hauling rails, consequently, he pays one hundred dollars for grazing thirteen head of cattle, to say nothing of the value of the two oxen, and wintering the same; or about seven dollars and sixty cents a head, when he could graze them upon his own premises for \$2 50 a head, and thus save \$67 50, provided the fence laws did not exist. But, says one, there are my hogs and sheep, you do not allow any thing for them. Well, let us see if any thing ought to be allowed. We will take hogs first. What do they get from the range? Why, nothing more than a few acorns in the fall, for which they run so much from one tree to another over the woods, that they had better be without them. The fatigue they undergo in getting the few they do get injures them more than the acorns do them good. But suppose that acorns were so abundant as to fatten hogs without any other feed, then we might expect to lose half of our whole stock of hogs by straying off or by thefts. And we see that this would be poor economy, to raise our hogs and then give one-half to get the other half fattened, and that on mast.

I cannot believe that any experienced farmer in this section of country (lower Virginia) can think that he has ever gained any thing by letting his hogs run at large, and if he will take account of all lost by diseases contracted in the woods—all that have strayed off or been stolen, he will find that he has paid dear for the range, as far as hogs are concerned.

Next sheep must be spoken of, but very few words will do for them. Consult every farmer

who suffers his sheep to run at large and you will find that he loses every year from twenty to fifty per cent. of his entire flock by their rambling off or being killed by dogs. I have heard some farmers say that if they got back half the number of sheep they turned out they thought themselves lucky. One thing is sure; that is, if a man cannot graze his sheep on his own premises he had better not attempt to raise them.

Now, Mr. Editor, we see from the estimates above made, that we are uselessly taxed in keeping our lands enclosed; that it is a heavy, a burdensome tax upon the farmer; and who is benefited? Is any body? Talk about the poor man's cow; but this is all humbug. This fence law is most oppressive upon the poor, because he is less able to incur the expense than the rich man. I will venture the assertion, that where one man is benefited one dollar per annum by the fence laws, ten men are damaged ten dollars each. Well now, what are we to do? Bear it we cannot. Our lands must be improved, and this can be done, and that quite rapidly, were it not for fencing. They are to be fenced, and that cannot be done. We have not the timber, if we were able to endure the hardship. Then these laws must be repealed or we must abandon our farms. Let us, then, respond heartily to the proposition contained in the report alluded to above; let one and all speak out, and if any has aught to say for the poor old rickety fences, let him speak out also. Let us adopt energetic measures, and zealously carry them out. We have justice and truth upon our side, and they will prevail. The will of the people is sovereign and must be obeyed. The majority are with us, or will be when the subject is fairly canvassed. All we want is action—energetic action, and I hope the Society which has made this present move will take hold of the subject with the same zeal which their committee has manifested, and that something like an organization of the anti-fence law voters may be effected.

SOUTHAMPTON.

July 10, 1853.

DOGS AND FOXES.

The Fauquier County Court, at its late session, entered up an order giving effect to the dog law. The following are its provisions:

The constables of the county are required to ascertain all the dogs in their respective districts, and report the names of their owners to the county court at its July term.

Each housekeeper in the county is allowed to keep one dog, exempt from taxation. If he have more than one dog, he shall pay twenty-five cents tax on the second dog, fifty cents on the third, and one dollar each on all over three. Persons other than housekeepers shall pay twenty-five cents on the first dog, fifty cents

on the second, and one dollar each on all over two.

The dog law placed it in the discretion of the Court to exempt packs of wolf or fox dogs. This was not done, but, as a substitute probably, an order was passed allowing fifty cents for the scalp of each fox killed in the county, so that fox hounds, by being diligent, may earn their taxes. We doubt, however, if this will not be deemed a hardship rather than a relief, by persons who are fond of fox hunting; inasmuch as it will tend to the extermination of foxes and the destruction of their sport.

The law is now fairly afoot, and the constables will soon be upon us with their searching interrogatories. It will be well to prepare for them, by disposing of all worthless or superfluous dogs without delay. Every person is held responsible for the dogs about any farm, house or premises in his occupancy.

From the Ohio Cultivator.

DRAINING AS A MEANS OF IMPROVING LANDS—AMMONIA IN RAIN WATER.

We have long been convinced that no improvement would be found so beneficial on most of the clay lands of Ohio, as *under-draining*. But the *expense* of the work, as compared with the value of the land, has hitherto been an insuperable objection to such improvements in the minds of our farmers. The time has come, however, when the value of the land, and the ability of the owners, render it both expedient and profitable that under-draining should be practised on many farms, and we are convinced it will be done quite extensively as soon as our farmers understand the advantages and *profitableness* of the operation, and can procure the best material for its performance.

Every farmer understands the importance of draining *wet* lands, so as to remove standing water from the *surface*, but very few have any just conception of the injury done to crops and the soil by an excess of moisture *beneath* the surface, or of the benefits which result from the filtration of rain water through clayey soils, where it is allowed to pass off into under-drains, or a porous subsoil. In speaking, therefore, of under-draining as a means of improvement, we have reference to lands not commonly ranked as *wet*, but those of a level clayey character, with compact subsoil, and forming a large portion of the best wheat lands in Ohio. Experience has abundantly shown that thorough draining of such lands will pay a liberal return for the capital invested.

Chemical science and experiments in practical cultivation combine to prove the importance of *ammonia* as a promoter of vegetation. It is this element which gives the principal value to guano and stable manure; (see article on ploughing-in green crops, in the Ohio

Cultivator, October 15th, 1852;) and as rain water, as it falls from the clouds, contains a small portion of ammonia, the importance of securing this valuable substance in the soil, instead of allowing it to run off the surface, is one of the strongest arguments in favor of under-draining and deep tillage. It is also an argument for which we are indebted to modern science, and one that has given a great impetus to these kinds of improvement in Great Britain. But there are many other ways in which draining is found to operate as an efficient means of improving lands; and here we cannot do better than to extract a few paragraphs from the volume of C. W. Johnson, (of England,) on "Modern Agricultural Improvements:"

"It was an early and just observation of those great improvers of agriculture who followed in the train of Walter Blyth and of Jethro Tull that the removal of land water is the foundation of all good farming. It is true that the axiom is admitted pretty universally, that it is an operation now carried on with almost annually increased perfection and profit to the farmer, and it would perhaps be still more systematically and advantageously extended if the occupier and the young cultivator more clearly understood the ill effects which land water produces, even at considerable depths, on the crops which grow over it.

The question sometimes occurs to the young farmer: "What difference is there between rain water and that which was once rain water too, that in the land? Why should we covet an abundant supply of the first, and be anxious for the removal of the last? Is there any difference in their composition?" This difficulty the chemists of our time have readily answered. They have shown, amongst other causes of difference in their value, that rain water contains ammonia, of which land is commonly destitute. This presence of ammonia in rain water has been placed, as Liebig remarks, beyond all doubt; it may also be detected in snow water, and it is worthy of observation, that the ammonia obtained by the chemical philosopher from these sources possess an offensive smell of perspiration and animal excrements, a fact which leaves no doubt respecting its origin.

It is to the presence of ammonia, then, in such waters, that one source of this effect may be attributed. It is true that the ammonia contained in rain water is in very minute proportions, and in spring water the proportion is probably still less; but then it must be remembered, what is not commonly very clearly understood, that the weight of water which annually falls upon the farmer's fields is very great. "If," remarks Liebig, (Organic Chem. p. 75,) "a pound of rain water contains only one-fourth of a grain of ammonia, then a field of 40,000 square feet must receive annually upwards of eighty pounds of ammonia or sixty-five pounds of nitrogen, (ammonia is composed of nitrogen and hydrogen,) for, by the

observations of Schubler, (made in Germany,) about 700,000 pounds of rain fell over this surface in four months, and consequently the annual fall must be 2,500 pounds. This is much more nitrogen than is contained in the form of vegetable albumen and gluten, in 2,650 pounds of wood, 2,800 pounds of hay, or twenty tons of beet root, which are the yearly produce of such a field; but it is less than the straw, roots and grain of corn (wheat) which might grow on the surface would contain."

[In Ohio and other central parts of the United States, the fall of rain is about thirty-six inches per year—which is seven and a half gallons, or seventy-five pounds to the square foot—1,625 pounds to the square yard—3,932 tons to the acre. The average amount of rain in England is very nearly the same as in this country, but falls more frequently, in light showers. It is easy to see that although, as has been stated, the amount of ammonia in a pound of water is very small, yet the thousands of tons which fall in a year upon an acre of land may contain as much as any kind of growing crop demands.]—EDITOR OHIO CULTIVATOR.

Of the use of this alkali to the farmer's crops there is no doubt, for as the same great chemist adds, "no conclusion can have a better foundation than this, that it is the ammonia of the atmosphere which furnishes nitrogen to plants." The way, too, in which ammonia is formed in the soil, by the decomposition of its organic matters, affords us one easily understood reason for the advantages derived by the removal of its land water, a process which is thus clearly explained by Professor Johnston: "Ammonia is naturally formed during the decay of vegetable substances in the soil. This happens, either as in animal bodies, by the direct union of the nitrogen with a portion of the hydrogen of which they consist, or by the combination of a portion of their hydrogen with the nitrogen of the air; or when they decompose in contact with air and water at the same time, by their taking the oxygen of a quantity of the water, and disposing of its hydrogen at the moment of liberation, to combine with the nitrogen of the air, and form ammonia. In the two latter modes ammonia is formed most abundantly when the oxygen of the air does not gain the readiest access. Hence, in open subsoils, in which vegetable matter abounds, it is most likely to be produced; and thus one of the benefits which arise from thorough draining and subsoil ploughing is, that the roots penetrate and fill the subsoil with vegetable matter, which, by its decay in the confined atmosphere of the subsoil, gives rise to this production of ammonia.

It is evident, then, that if the surface or subsoil is already surcharged with stagnant land water the entrance into it of the rain water, which is so beneficial to the crop by the presence of ammonia and atmospheric gases, and also by promoting the decomposition of the materials of which the soil is composed, is

entirely prevented; and, moreover, by this occupation of the soil by land water, another ill effect upon the soil is produced, its temperature is reduced. "The presence of too much water in the soil," says Professor Johnston, "keeps it constantly cold. The heat of the sun's rays, which is intended by nature to warm the land, is expended in evaporating the water from its surface; and thus the plants never experience that genial warmth about their roots which so much favors their rapid growth."

An important effect is observable in all soils properly prepared to receive heat and water, and permit their descent, viz: that the transmissions of accessions of heat downwards continues during the afternoon of the day (in summers) and throughout the night, whilst the super-strata (chiefly from seven inches upwards) are losing some amount of their heat by conduction upwards and radiation. Such is the influence of good and deep drainage and ploughing upon the temperature of the soils thus improved. But the benefit does not terminate there; others follow from those operations, advantages which are thus described by Prof. Johnston: "Vegetable matter becomes of double value in a soil thus dried and filled with atmospheric air. When soaked in water, their vegetable matter either decomposes very slowly or produces acid compounds, more or less unwholesome to the plant, and even exerts injurious chemical reactions upon the earthy and saline constituents of the soil. In the presence of air on the contrary, this vegetable compound decomposes rapidly, produces carbonic acid gas in large quantity, as well as other compounds on which the plant can live, and even renders the inorganic constituents of the soil more fitted to enter the roots, and thus to supply more rapidly what the several parts of the plant require."

It is to such labors as these that the farmer's gratitude is justly due; their value can hardly be too highly rated, and in the result no mean harvest has been produced; for there is no branch of agriculture that has attracted more general and successful attention within the last few years than the improved drainage of the land. Science has here gone successfully hand in hand with practice, to a very useful and very profitable extent. "It was only in 1835," says Mr. Pusey, "that we heard in England, that a manufacturer in Scotland, Mr. Smith, of Deanston, had found the means of making all land, however poor it might be, warm, sound and fertile, and that this change was brought about by two processes, thorough draining and subsoil ploughing. His rule of draining was this, that we are not to endeavor merely to find out hidden springs, and to cut them through by a single drain, which in some of our books appeared to be regarded as all that was necessary, but that as the whole surface of the retentive soils is rendered wet, not by accidental springs, but by the rain, the whole surface of the fields must be made thoroughly dry by the under-drains running throughout at

equal distances. "Any field," he said, "however wet, might be so dried, provided these under-drains were cut sufficiently near to each other." This was the principle of thorough or frequent draining asserted by Mr. Smith, of Deanston, in 1835; and this principle, which was then new and startling to the generality of farmers, may now be regarded as firmly established.

As regards furrow draining on tenacious clay soils; the drainage of these soils has generally been done in shallow depths, under the prevailing common opinion that otherwise the water would not get into the drains. The contraction which the clay beds undergo when cut through by parallel drains has thus been entirely overlooked. This contraction, however, is most important, so much so (as I have found by experience) that drains dug from thirty to forty inches deep have operated to much greater advantage than those of shallower depth. The bed of clay contracts itself near the drains as deep as the drains are made; and the deeper the bed of clay is contracted, the larger will be the fissures for the water to percolate through to the drains. In well drained land, the water does not enter the drain by the furrow, but percolates through the fissures (formed by contraction) from the ridge to the drains.

AGRICULTURAL ASSOCIATION.

For some time past, efforts have been in progress, looking to the formation of an Agricultural Association in Fredericksburg, which should also embrace the mechanical and manufacturing interests.

This highly desirable object was effected by a meeting, held at the Court House, on Saturday last.

William Pollock, Esq., was called to the Chair, and J. H. Kelly appointed Secretary.

Committees from Falmouth and Fredericksburg, appointed to solicit memberships, reported that they had been eminently successful, as none who had been solicited had declined to connect themselves.

After various propositions had been made, which were withdrawn, it was, on motion of Mr. W. R. Mason,

Resolved, That the organization should be known as the Fredericksburg Agricultural Society.

An election was then held for officers, when the following were chosen:

President—William Pollock.

Vice President—Maj. S. Crutchfield.

Secretary and Treasurer—J. H. Kelly.

The following resolution, offered by E. Conway, was adopted:

Resolved, That this Society is willing to unite with the Rappahannock Agricultural Society, provided the annual meetings shall alternate, commencing at Port Royal, on the 10th of November next, and that a committee

of three be appointed to confer with the Rapahannock Society, with a view to carry out this arrangement.

The Chair appointed Messrs. John Seddon, G. W. Strother and E. Conway, the Committee.

The following committees were then appointed for the purpose of soliciting memberships and receiving subscriptions, to be forwarded to the Secretary and Treasurer:

Fredericksburg—H. B. Hoomes, William T. Hart and F. Slaughter.

Stafford—John Seddon, James Ashby, N. W. Ford.

Spotsylvania—Maj. S. Crutchfield, J. H. Lacy, Maj. S. Chancellor.

VIRGINIA STATE AGRICULTURAL SOCIETY.

We present our readers with the proceedings of the Executive Committee of the above Society at a meeting lately convened for the purpose of completing the details of arrangements for conducting with orderly and systematic propriety the Society's first annual exhibition, to be held in Richmond on the 1st, 2d, 3d and 4th days of November next.

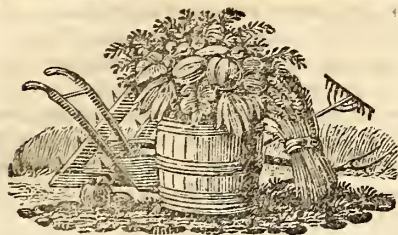
The scheme of premiums is comprehensive and liberal—the Rules and Regulations practical and appropriate. The Judges, selected with great care and circumspection, are believed to be gentlemen whose high character and standing are such as to challenge universal confidence.

This work has been accomplished at no small sacrifice of time and labor on the part of the members of the Committee, who have acted under a solemn sense of responsible obligation, involved in the relations they had voluntarily accepted as the official organs of the Society.

Their motives have been divested of every thing sinister or selfish. They have been actuated alone by the highest considerations of public utility. They will reap the only coveted recompense of their labors, if they shall be permitted to witness the successful accomplishment of the ends at which, with singleness of purpose, they have steadily aimed; or they will deeply share in common with all the friends of the cause, in the chagrin and mortification which must result from a disappointment of their cherished hopes of a brilliant success.

They have nobly performed their part. They have acted with an energy of purpose from which they could not be swerved by discouragements; like men who, if they could not win success were determined to deserve it. "Prone to hope where the more cautious despond," they have moved forward in solid column, gallantly contending with every obstruction which opposed itself in their way, until "the rough places have been made plain," and "the crooked places straight."

And now we ask, is there no correlative obligation on the part of the Farmers, Manufacturers and Mechanics of Virginia? Will they by indifference to their own best interests



THE SOUTHERN PLANTER.

RICHMOND, AUGUST, 1853.

TERMS.

ONE DOLLAR and TWENTY-FIVE CENTS per annum, which may be discharged by the payment of ONE DOLLAR only, if paid in office or sent free of postage within six months from the date of subscription. Six copies for FIVE DOLLARS; thirteen copies for TEN DOLLARS, to be paid invariably in advance.

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All communications for the columns of this paper, and all letters of inquiry, to insure prompt attention, must be addressed to Frank: G. Ruffin, Shadwell, Albemarle County, Va.

All business letters connected with the Planter must be addressed to P. D. Bernard, Richmond, Virginia.

POSTAGE ON THE PLANTER,

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To any part of the United States 1½ cents per quarter, or 6 cents per annum.

and the honor and prosperity of the State, disappoint the hopes of success which must rest upon the response they shall give to this last appeal to their patriotism? Recreant sons are they to "the blessed mother of us all," who, shut up in the impenetrable coldness of isolated selfishness, cannot be melted into confluence with the current of sympathy which warms the breast of those who have conspired to raise Virginia to the height of prosperity and glory to which her position, her climate, her soil, and her still undeveloped resources of Agriculture, Commerce and Manufactures entitle her. She expects every man to do his duty. Will any loyal son of Virginia shrink from the obligation to enlist in this holy warfare? We will not believe it. We hope, better things of them, although we thus speak. The exercise of beneficence will bring a rich reward with it.

"The man who seeks her peace
And wishes her increase,
A thousand blessings on his head!"

ALFALFA, OR CHILIAN CLOVER SEED.

We have received from the Patent Office some fifty small packages of Alfalfa, or Chilian Clover—each package accompanied with a printed account of the plant and directions for raising it. Those who have tried it say that it is a sort of lucerne. It is none the less valuable for that, as lucerne is, we know, one of the most valuable of all plants used for soiling, or cutting green to feed to cattle. The postage on each package will be six cents, and those who will send us two postage stamps shall have a package and directions enclosed to them.

Our thanks are due to the same source for two copies of the Agricultural Volume of the Patent Office Report.

For the Southern Planter.

CORNCOB IN THE ROOF OF A HORSE'S MOUTH.

Mr. Editor.—Last summer one of my neighbors had a horse that declined very rapidly without any perceptible cause. After many attempts to find out the cause he, by close observation, discovered the horse could not swallow his food. He had the tongue pulled out, expecting to find it sore about the root, but instead of a sore tongue, he discovered a piece

of corn cob stuck fast in the roof of the mouth, between the grinders. He loosened it with a stick, and the horse was relieved immediately, and improved as fast as he had declined. I had a horse in the same fix this spring, which I relieved before it was much reduced, having the experience of my neighbor to direct me what was the matter. I have very little doubt I lost a horse spring before last from the same cause, not knowing then what was the matter,

With much respect,
A SUBSCRIBER.

Harris', Louisa, July 6, 1853.

We have had the same experience in the case of a valuable horse of our own. Finding that he would not swallow and was rapidly wasting away, we ordered him to be drenched with gruel as a means of supporting life, when, upon opening his mouth and pulling his tongue out, the cob—a very small piece—was discovered just forward of the palate, which, along with the whole throat, was very much inflamed. Upon removing it, the horse was entirely relieved, and rallied in a few days.

FLY AND JOINT WORM.

Mr. Isaac Irvine Hite of Sunny Side, near New Glasgow, Amherst, has written us a letter on the joint worm, from which we take the following extracts. Accompanying the letter were three specimens of which he says:

"In one you can see the fly in the flaxseed state; in another the worm was close by it—you can see his mark; the third, you can see was in a flaxseed state, pressed in the stalk by the blade, or it was partially penetrated by the fly when the egg was deposited. I am anxious to hear what you and others have to say about it. I give you facts; you may make what you can out of them.

"I have been on the look-out for the joint worm, and they have at last made their appearance amongst us, but they are few and far between. After very close search after all sorts of damaged plants of wheat, I became convinced that the joint worm and fly (hereabouts at least) are one and the same thing. I found fly in the flaxseed state, between the blade and stalk. I also found them in the same state just above the joint, inside the stalk. I also found a maggot in the joint of the same stalk, but below, and eating upwards through the joint. I also found three maggots in the three joints above the ground in other plants. I found a hard lump on some joints, and the wheat bent elbow-like; and in that firm lump on the joint I found just the same sort of maggot."

His idea of the remedy is,

"That we should seed only the early kinds of wheat, and that in the month of March; at any rate by the first of April. (If it be a late spring, the 5th of April.) We should have our wheat eaten off as close to the ground as sheep, calves, colts and hogs can possibly eat it; (hogs will eat off rank spots of wheat that sheep will avoid.)"

On Mr. Hite's remedy by grazing, we are sorry to have to observe that it has failed completely in our own case—a field of very early red wheat, well guanoed all over, and grazed through the winter with sheep, having failed to yield ten bushels per acre.

He is mistaken in his conclusion that the Hessian fly and joint worm are identical anywhere—their habits, forms and modes of attack are different. Nor are we certain that the specimens sent us, in which the fly in its pupa state is firmly imbedded inside the stalk in the pit of the joint, are really the Hessian fly, whose place of lodgement is generally a very different one. When it is recollected that in Europe there are some thirty odd insects peculiar to the wheat plant, each varying in habits and form, we hope to be excused for our skepticism.

We have to thank Mr. Hite for his letter, the contents of which suggest the necessity of still further observations to give them their full value.

ERRATUM.

In the June number, page 186, for "nosceatur" read "nota sit," so says our correspondent, who is tender of his Latin. If we had written, being "above all Roman fame," we would have said "noscitur," and *perhaps* have injured our reputation with scholars.

For the Southern Planter.

LIME.

Mr. Editor,—The report from Mr. Hurt, in the July number of the Planter, of the results of his experiments with lime, induces me to communicate to you some of my own, should you deem them of sufficient value to occupy any space in your columns; though I am ashamed to say that they have been so loosely conducted as to contribute scarcely a mite to the information so much to be desired upon this subject. Some five or six years since, be-

ing but a novice in the business of farming, I was unwise enough to fallow for wheat about twelve or fifteen acres of an old field—a light gray soil—thoroughly exhausted and covered with a luxuriant growth of broom straw. Upon two acres of it, I applied one hundred bushels of shell lime, and upon a third acre, twenty-five bushels. During the winter and early spring there was a very marked difference in color between the limed and unlimed portions, so as to enable me at a little distance to trace the lines at a glance. Gradually, however, as the season advanced, this difference became fainter, and finally vanished, and when the field was harvested, which, as you may suppose, scarcely "brought seed," there was not upon the limed acres one wheat straw the more, nor ever since, one broom straw the less than upon the others. I did not sow clover, but did herds grass, which pretty generally shared the fate of the wheat. Last fall, I burnt off the broom straw and sowed wheat again, with an application of guano, which, as usual with us, brought a remunerating crop. But to this day I have not seen one imaginable symptom to indicate the presence of lime. Of course, this experiment proves but little, as it is now well established that the beneficial effects of lime are to be seen chiefly in its action upon putrescent manures or vegetable matter. But I have often seen broom sedge classed by agricultural writers among those acid plants supposed to originate in some injurious vegetable acid existing in an impoverished soil, which can only be eradicated by the application of an alkali to neutralize them. Supposing this to be true, I looked confidently for this effect, viz: the annihilation of my broom straw, but, as I said before, I was disappointed—the field, in another year, put up as thick a growth of it as ever.

I have, also, upon several occasions, given a heavy dressing of stone lime to a fine clay loam, with a liberal combination of manure, and grown upon it, successively, corn, wheat and clover. I made no measurements or accurate comparisons, but was not struck with any superiority in the product of this land over similar soil manured without lime. It is a cause of no little regret to me, that having expended some money and labor in these experiments, I did not direct them to the point of greatest importance, and thereby, in the time which has elapsed, have almost decided the question as it relates to this region of country, whether lime is required at all. I refer to its use in conjunction with manure or vegetable matter upon worn out lands. But, in truth, it is so expensive to us—costing, at least, fourteen or fifteen cents per bushel delivered at our farms—that nothing short of the most miraculous results would justify its use, and therefore, I have felt but little zeal in pursuing my observations. Still, I gather from Mr. Ruffin's writings that old field pines and sorrel, particularly the latter, are infallible signs of the want of lime. I take up my old fields to improve,

dress them with farm yard manure, guano, &c. and make pretty fair crops; but, instead of being green with clover, they are red with sorrel! Now, is lime an antidote to sorrel? that's the question. And if it is, ought we to use it at such an expense? that's the question, too.

Very truly, your friend,

G. F. H.

Elkora, July 20th, 1853.

From the American Cotton Planter.

MORAL BENEFITS OF SLAVERY.

FREEMAN HUNT, *Editor of the Merchants' Magazine, etc.*

Sir: The excuse for sending this article to a *Merchants' Magazine* is found in the title and design of such a work; as a *military magazine* is the appropriate repository of material supplies for the future, so is a *Merchants' Magazine* intended as a repository of mental supplies for their use. Slaves are considered and used as merchantable property by nearly one-half of the States, and are guaranteed in such use by the constitution of our government; hence any information respecting any other species of merchandise—and I feel assured that an article recapitulating the old, or adding any new light on that subject, will be highly appreciated by many of the readers of Mr. Hunt's incomparable journal. I propose, first, to consider the moral benefits of slavery, its design and effect, as is set forth in the universally acknowledged book of morals.

2d. That it is the true, speedy, and successful method for civilizing the heathen.

3d. The probable duration of slavery.

Permitting history to guide us, we must conclude from the municipal laws found necessary to govern the Hebrews, that the chosen people of God were a very depraved heathen, previous to their becoming slaves to the enlightened Egyptians.* Although subject to the instruction of that enlightened people for four hundred and thirty years, yet we find when they are intrusted by Providence with self-government, that they were wholly incompetent; and the inspired instrument of their delivery had to operate on their religious fears, (with a thus sayeth the Lord,) to enforce the most simplest sanative laws; a circumstance unknown, if ever required to govern any other heathen. Hence we infer that they were, previous to their bondage, a very depraved people, but having been taught subordination while slaves, their inspired guide could enforce civil laws among them by appealing to their fears and gratitude, which are the cultivated sensibilities of a slave. That the God of Israel did permit his people to be enslaved, no question can be made, and the permit being couched

in the strong language (shall) of the decalogue, would lead us to believe that it was an unqualified edict, after the fulfilment of which, they were to be made a great nation; by deduction, we infer that in their native condition they were not suitable material to make a great and useful people of; nor until they were taught subordination and the civilized arts by the enlightened Egyptians; thus receiving the moral benefits of their enslavement.

The plan adopted for the civilization of Israel appears to be the favorite of God to ameliorate the condition of the heathen, and to humble the proud. We find him using the same strong language (shall) while instructing the Hebrews to* buy of the heathen and enslave them forever, which shall be an inheritance for their children afterwards; evidently limiting the term of their bondage by his own discretion, or their advancement in the arts of civilization and self-government, as in the case of Israel, and furthermore instructed them to enslave the Egyptians, for the purpose of inculcating humility. According to the book of morals, this species of merchandise (property in slaves) has been used as a means for ameliorating the condition of man, since a very early period of the world's history, by a thus sayeth the Lord, and would seem that its continuance was intended until an object was accomplished. We find under the new dispensation of Christ, who was sent as an exemplar to the world, that his teachings were definite in regard to the relation he found existing between master and servant; his intelligent vicegerent (Paul) was not less mindful of the then existing institution of domestic slavery, of which we have an evidence in his inimitable letter to Philemon, in regard to his runaway slave, whom he overtook and sent back to his owner, begging for his pardon. Much more proof could be added, that the Bible recognizes and teaches the enslavement of heathen, and that they are merchantable property and have been since time immemorial; but enough has been referred to for the purpose of inviting investigation.

2. That it is the true, speedy and successful method for civilizing the heathen. We have no evidence that any other plan has succeeded to any great extent; it is true that the Christian churches discourse eloquently in regard to their exertions in behalf of the heathen, but judging by the fruits of their labors at home, the plain inference is, that but little had matured abroad. The first effort to introduce this plan of civilization in America was made with the aborigines, (Indians,) but the Europeans finding them unprofitable servants, and yielding to selfish considerations, adopted the African; instead of persisting in that which would have proved a blessing to the natives in the end. Since the English have had possession of the country, the Indians have had am-

* Gen. xv. 13; Gen. xlv. 8-4; Exod. xii. 40.

† Lev. xviii; Deut. xiv.

* Levi. xxv. 45-46.

‡ Ephes. vi. 5.

† Isai. xiv. 2.

§ Philemon.

ple opportunity for improvement in the arts, and moral government of civilization; the protection of our government is and has been thrown around them, they have been encouraged by example, sums of money have been appropriated to their use, enough to place them in comfortable circumstances, without any valuable consideration (so far as they are concerned) from them in return. Collection after collection of money has been made, much of it the result of the properly directed labor of the African heathen, and appropriated to their civilization; teachers and preachers have been sent to them, many valuable lives exhausted in their service; the result of all these efforts is, that they are Indians yet, and are likely to continue such, with the addition of the vices of civilization, and an abhorrence of its virtues. The reason for all this misspent time and money is found in the want of authority to control them. The task of domesticating a wolf unconfined would be as readily accomplished as to instruct, with a permanent effect, the Indian, while in the employment of his wild freedom, with no other faculty cultivated but sense, and that undisciplined. The culpability of this government must forcibly appear to every reflecting mind; having those people in our midst so many ages without advancing them in the road to civilization; instead, we see them rapidly growing worse in a moral point of view, extinction awaiting their race, a burlesque on the divine image, and a disgrace to the country; and that, too, with the book of morals in our hands, plainly pointing out the true, speedy and successful method of civilization. That they are of a superior order of intelligences, when compared with the African, we have evidence in their sagacity and determination in self defence; and that they have received a more enlightened revelation, is manifested by never capturing their brethren with the view of selling or enslaving, "but of the children of the strangers," which edict they fulfil, apparently with the same views that the Hebrews were instructed, through their prophet Isaiah, to enslave the Egyptians. Yet with capacities superior and opportunities ampler for improvement, they are not comparable to the African heathen, which we have under process of civilization according to the Bible plan. Had the efforts been persisted in, which were made according to this plan, it is probable ere this our government could have erected a monument to herself, in the form of a state made up of civilized aborigines, effected by making them profitable laborers, whereas, they have and are costing the labor of the country millions of money annually, as a means of defence against a worthless and wild enemy.

Having examined the second proposition analogically, of necessity, we will offer an analysis of the third, after the same manner of reasoning. The duration of slavery is in the hopeful, but gloomy future; hopeful, because there is a hope during time, and gloomy,

because of the great number of heathens that are in the world. We have not the least evidence, according to revelation, that slavery can cease so long as there are heathens, or until the world is brought to the light and liberty of knowledge; it is then we may look for equality among men of every grade.— Knowledge, or mental power, has taken place of the physical of past ages, and until there is a mental equality, physical differences will prevail to the extent of forbidding the promiscuous amalgamation of the races, which of right should, that the god-like principles of man may continue to bring into subjection the animal of his kind, that reciprocal benefits may accrue, and the world's uses be served. Had England and the Northern States (from which the present generation were taught the first principles of domestic slavery,) continued to bear their part in this work, and not have yielded to self interest, by dispensing with it, because of its unprofitableness, the duration of African bondage might have been shortened, as Providence evidently has an object to accomplish through it, as in the case of Israel; hence the subject resolves itself into this proposition: if it required four hundred and thirty years to fit the Hebrews for self government, under constant domestic instruction by the entire Egyptian nation, how long will it require a small part of the American people to effect the same with fifty millions of Africans. If human officiousness were to succeed in releasing or extricating them from their present situation, it could but give a different and probably a worse form and location to their bondage; if placed in colonies, a despotic government would of necessity have to be administered, either by some of them or by the governments interested in their colonization, from the fact, that a people unfitted for freedom cannot be made free, nor can a people prepared for freedom be made slaves. The interference by human agencies with the ways of Providence, in securing permanently the release of Africa from mental and physical bondage, may stay the work for a time but cannot prevent it; and when the work of their bondage is complete, the exodus may be delayed by the self sufficient wisdom of man, as did the Egyptians, but they will pass to the Canaan provided for them, although it should require the Atlantic Ocean to be opened with the dividing rod which was employed on the Red Sea. Their having become a nation great in numbers with no reliable attainment in self government, presents physical circumstances which must forever preclude the possibility of individual or national action effecting their exodus, and an attempt to hasten it without a knowledge of the divine will, may meet the rebuke that Pharaoh received in attempting to retain the Hebrews.

Respectfully yours,

WM. S. PRICE.

Spencerville, Marengo Co., Ala.,
February 28, 1853.

DR. VALENTINE'S ARTIFICIAL GUANO.

In answer to a query made through the Planter last spring, respecting Dr. Valentine's Artificial Guano, we annex the following testimonials; and we are informed by Messrs. R. R. Duval & Brother that they have many others, which they will be pleased to show to those who desire to see them:

Extract from a letter from N. C. Kinney, of Augusta County, Virginia:

Say to R. R. Duval that his Artificial Guano has disappointed me. I bought it to please H. expecting it to be a "humbug," but the wheat I sowed it on, (six acres) in a field where it is all good, is ahead of the best of it. The color is *very* fine and several shades darker. I shall order some more for my next crop.

Dated Staunton, 25th April, 1853.

Messrs. R. R. Duval & Brother, Druggists, Richmond, Virginia:

Dear Sirs,—Agreeably to your request, I drop you a few lines, to inform you of the benefits derived from the use of your Artificial Guano—1st. I used on twelve acres of land one ton for corn, by sowing in the drill when the rows were laid off, which is not more than 166 pounds to the acre—very common land. I am at this time under the impression the yield will be one-third more than it would otherwise have been with the same seasons. I believe 250 or 300 pounds per acre would make double the crop on the same land. 2d. I used 600 pounds on my tobacco land per acre, and at the present time it bids fair for a heavy crop of tobacco. I discover it is a fine preparation for corn and tobacco, which are all the crops that I have used it on. When my crops come to perfection, I can say more concerning the preparation, but so far as I have used it, it came up to my expectation.

Yours respectfully,

ALEX. T. MARTIN.

Chesterfield, July 27, 1853.

ATKINS' AUTOMATON REAPER.

The following interesting history of the invention of the above reaper, noticed in our columns of last month, we cut from the Valley Farmer. We sincerely trust that the machine may succeed, and reward the inventor:

Its Invention.—The inventor is MR. JEARUM ATKINS, late of Will county, Illinois, now residing in Chicago. He is a millwright by trade, and as this invention testifies, an original and remarkable mechanical genius. About ten years ago he had the misfortune to be injured by a fall, and has since been almost

wholly confined to his bed, being unable even to sit up more than two or three minutes at a time.

Two or three years ago, a reaper was brought into his neighborhood, and an opportunity given him to examine it for a few minutes. A farmer present, knowing his inventive skill, remarked to him, that if he 'would only attach a rake to it, he would make his fortune.' Being a son of poverty as well as affliction, compelled to rely wholly upon his friends for a support, they themselves being also poor, yet possessed of a manly, independent spirit, the remark awakened his thought and determination. Various plans were successively formed and abandoned without trial; farther than a small model, till last winter he struck upon a wholly new arrangement. Having mentally studied out the details, he ascertained by mathematical calculation, before making any part of his model, the size, movement, and effect of each separate piece, and then made one part after another of his model, according to his figures, put the separate pieces together, and the whole movement was effected exactly as calculated, even to a little rise in the rake as it is drawn across the platform. That model has not been altered, and the full sized machine is almost precisely the model enlarged.

Considering the novel and complicated motions, yet perfect simplicity and small number of pieces by which they are produced, it shows a very high order of mechanical talent to have at once perfected such a machine, and in such a manner. Most inventors, it is believed, get some parts to work right in a model, and plan and add another, but the whole plan of this Self-Raker was entirely formed in the inventor's mind before a single piece of wood or metal for his model was touched.

Seldom is it that an invention involving anything like the novelty and complicated movement of this, is at once, and so successfully introduced into practical use, even when the inventor has the benefit of much experience in the branch of industry for which he is laboring; yet, so thoroughly had Mr. Atkins studied out all the difficulties to be obviated, that, though he had never seen a reaper but once, and then not at work,—notwithstanding he knew nothing of grain cutting, having from boyhood been closely devoted to his trade till he became bed-ridden; still, so correct were his views, that where the mechanics deviated from his plans in constructing the machine for trial, it failed, and his wishes had to be followed out in every particular.

Not only has Mr. ATKINS succeeded in producing a good Self-Raking Reaper, and so signally triumphed when others have failed, but he has also invented an entirely new mechanical movement, simple and beautiful, which will doubtless be applied with great advantage to other uses. And it will not be improper, I trust, to suggest to mechanics that they render their unfortunate brother the just courtesy

which would be so highly appreciated by him to call this invention ATKINS' MOVEMENT.

This account may by some be considered unnecessary and out of place; but were the reader, by an acquaintance with Mr. ATKINS, enabled to appreciate the modesty of his claims to public notice, the low estimate which he himself places upon his inventions and his genius, which excite the admiration of every mechanic and scientific man with whom he is brought in contact, he would, with the writer, rejoice in the opportunity to draw from obscurity, in which he has been wholly hidden till the last few months, one who, under more favorable auspices, would have ranked with the most remarkable men of his day.

The machine was first brought out late last season, and then only in an imperfect shape, yet, at every exhibition where it was presented, the first premium was awarded it over others, except at the trial of the New York State Agricultural Society at Geneva; and here the failure to receive it seems to have been caused rather by adverse and uncontrollable circumstances than by any defect in the machine. A letter from H. D. Bennett, Esq., of Geneva, to Mr. Wright, says; "The machine was tried under very unfavorable circumstances, but every one that saw it was of the opinion that it was the machine; and I have seen a few of the farmers that saw its operation, and they all very willingly signed the enclosed certificate—all good, practical farmers."

* * * * *

EXTRACT FROM CORRESPONDENCE.

Buckland, Va., July 22, 1853.

* * * * I believe that every farmer in the State ought to take the Planter, whatever other paper he may be taking beside. I should like to see that *Bee Tamer* over here. I think after thirty years' experience with bees, I know something of their habits, &c.; but it is the first time I have heard of a swarm of bees filling themselves with food when they were going to swarm. I have known them to lie on the outside of the hive for days and nights together before swarming, and then if two or three days of bad weather occur after swarming, one-half or more would die out. I manage my bees with as little trouble as most men, but they are sometimes an insubordinate race, and will cut up all sorts of capers. I think without "*rhyme or reason*," and very much like some writers, write about them. I believe about as much in *patent bee hives* as I do in *patent pig-styes*. If you will give a good swarm, early in May, a good hive of any shape you please, and place them where they can have plenty of good pasture, you may calculate on a good hive of honey. And if you have a good pig, and put it in a good sty and give it plenty of good food, you may expect a good porker at Christmas. Bees are not republicans;

their government is monarchical, and their sovereign is not reared in the common walks of life, nor in the common cells, but in a palace made and provided. After a good many experiments and some observation, I have come to the conclusion that a common hive, round or square, with a box on the top, about eight to ten inches square and four inches deep, that the bees can find access to through a two inch hole in top of the hive, is about as good a plan to get nice honey as any other. I believe it is the practice of farmers, when they have more stock than they wish to keep, to sell out or kill off the surplus; and so I do with my bees—they are a prolific insect, and if all are kept alive with merciful intent, they would soon become too numerous for their own comfort.

Yours,

J. S. T.

THE GAD-FLY.

This is a term applied to several species of insects belonging to the family *Æstridæ*. They are often called bot-flies. The larva are bred in various parts of the bodies of living animals. The horse, the ox, the sheep, the deer, and the hare, are each attacked by one or more species, and even man, in some countries, is not exempt from annoyance by a peculiar species. The habits of the different species are quite various—some breeding in the skins of animals, as the *Æstrus bovis*, or ox-bot—others in the intestines,—as the *O. equis*, or horse-bot,—and others in the cavities of the head,—as the *O. ovis*, or sheep-bot.

The effect which these parasites produce on the animals in which they breed, is a question on which there has been much discussion. In regard to the horse and the sheep, the popular belief has been that the insects frequently caused death. On the other hand, the distinguished veterinarian Youatt, came to the conclusion that the bot did no injury to the horse, and that with sheep it might even be "serviceable." Careful investigations carried on, several years ago, convinced the writer of this article that the sheep-bot, usually described as "the worm in the head," was not the cause of the mischief ascribed to it, and so far as opportunity has been had for observation, a similar conclusion is justified in respect to the principal species which attacks the horse. But we are by no means prepared to believe that these insects do no injury, and still less that they are beneficial to the animals on which they prey.

The instincts of animals may in general be deemed safe guides; when uninter-

rupted, they all tend to self-preservation, which has been properly called the first law of nature. In the case under consideration, most animals have an instinctive dread of the parasites alluded to. Thompson speaks of the terror which seizes on cattle when attacked by "angry gad-flies."

"Tossing the foam,
They scorn the keeper's voice, and scour the plain,
Through all the bright severity of noon;
While, from their laboring breasts, a hollow moan
Proceeding runs low-bellowing round the hills."

Sheep evince a great abhorrence of the species by which they are assailed. The fly endeavors to deposit its egg in the nostrils of the sheep. To avoid the enemy, the animals huddle themselves together on some dusty spot, with their heads to the centre and the noses close to the ground. To avail themselves of the protection which such a situation affords, they will remain for hours exposed to the burning heat of the sun. If a fly comes near, they strike violently with their fore feet and at the same time plunge their noses in the thickest dust. Sometimes the fly, darting out suddenly, will attack the sheep while quietly feeding, and leave an egg in the nostril. In such cases the animal exhibits great uneasiness—shakes its head, stamps and runs to some place where it can protect itself.

There are three species of horse-bots. They are commonly known as the large bot-fly, the small, or red-tailed bot-fly, and the brown bot-fly. Of these, the first named is most numerous. It deposits its eggs chiefly on the fore legs of the horse below the knees, sometimes along the belly and flanks. This species in the fly state, when horses become accustomed to them, appear to occasion but little uneasiness. But the other species,—especially, the brown, which deposits its eggs on the throat of the horse, are much dreaded. The fly, which attaches its eggs to the legs, is so bold that it keeps round the horse continually, attaching an egg as often as suits its convenience. It may be readily caught in the hand. But the kind which lays its eggs on the throat is very shy. Its mode of attack is similar to that of the species which preys on sheep. Without being previously visible, it suddenly darts to the throat of the horse, fastens an egg to the hair, and as suddenly disappears. It hides itself on the ground, and when ready, repeats its attack. If the horse moves, it follows, but so far behind as to be seldom no-

ticed. It is excessively annoying to the horse, who tries every way in its power to shield himself. Feeding, or quiet rest, cannot be enjoyed when this fly is about. If there are several horses together, they stand with their heads over each others' back; where there is but one, he puts his head across the fence to keep the fly from his throat. If they have occasion to move, they do it with the greatest expedition.

A person by standing at the head of a horse, and watching for the appearance of the fly, can catch it when it alights on the throat. It will be found darker in color, and considerably smaller than the one which lays its eggs on the horse's legs. The species probably differ as much in the larva, as in the fly state. The larva of the brown bot is nearly one-third smaller than that of the other. They are said to differ, also, in regard to the parts of the stomach of the horse to which they attach themselves. The late Payne Wingate, of Maine, who paid much attention to bots in horses, stated that he usually found the small bots clustered near the œsophagus, or gullet, and in some instances had found them so crowded into that organ as to have choked the animal to death. He had never observed anything of this kind with the larger bot, and it was his opinion that this species occasioned the horse but little inconvenience. Can it be that the greater abhorrence which the animal has of the fly of the smaller species, has any connection with the greater injury liable to be done by the larva?

Whether bots ordinarily produce injury and death in horses by eating the coats of the stomach, as is alledged, is perhaps still a mooted question. We have seen cases where the stomach of a horse which was opened immediately after death, was perforated, to a great extent by the larva. But it is said by some that this was done after the death of the horse, or after the bots found he would die. The horse, say they, died of a colic, or some other disease, and the bots wanted to get away from the worthless carcass. How shall the matter be settled?

In regard to the sheep-bot, we have already alluded to the idea that it causes death. We think it is not well founded, for the following reasons: 1st. We have seen perfectly healthy sheep—such as were in high condition, and killed for mutton—which had the nasal sinuses filled with bots to as great a degree as in subjects supposed to have died from this

cause. 2d. We have examined the bodies of many sheep which were supposed to have died from "worms in the head," and in every case found evidence that death was produced from other causes—frequently "the rot," sometimes, disease of the lungs. 3d. The membrane which lines the nasal cavities, in subjects where bots have been most numerous, (and we have taken forty from the head of one sheep.) has not exhibited evidence of inflammation or local disease.

It is evident, however, that the deposition of the egg in the nostril, and the ascent of the worm to its lodgment, occasions the sheep much discomfort, if not actual pain. So with the efforts of the full-grown larva to escape from the head; but the full extent of the injury done to the sheep, cannot be told. The period of the attack of the fly, is from the last of May to August. The transformation of the larva takes place early the following spring. Its escape from the head is assisted by the sneezing of the sheep, which probably results from irritation produced by the motion of the insect. The worm when ejected, buries itself in the litter of the sheep-yard, or in the ground, and in due time emerges in its perfect form. All do not, however, pass from the head previous to transformation; we have found the shells of the pupa in the nasal cavities, showing that the change had taken place there.

Various prescriptions have been given for protecting sheep against this insect. At one time, tarring their noses was thought to be a specific. It seems probable that so long as the tar would emit a strong odor, it might repel the fly; but it would be necessary to make frequent applications of it, to answer this purpose. Among those acquainted with the practice of tarring, the opinion has been expressed that as ordinarily administered, little or no good was derived from it.

The ox bot-fly deposits its eggs on the back of the animal, and the larva are bred in the skin, producing swellings called "warbles," with which most farmers are familiar. In general, they do not appear to occasion the animal much inconvenience. But as the worm gets near its full size, it makes a hole, nearly equal to the diameter of a common goose-quill, through the surface of the skin. This takes place in spring, when from the hair of animals becoming thin, if they are exposed to wet weather, the water soaks into these holes,

and causes sores. Some animals have their backs almost entirely covered with warbles, and their backs are sometimes so sore that they cannot bear the least touch of the curry-comb or card. Cattle which are kept under cover at all times, are never attacked by the gad-fly. Oxen which are kept most of the time in yoke, have but few of the larva—the shyness of the fly probably inducing it to avoid an attack while the animals are guarded by men. Hides which have been filled with the worms, are much injured for leather, unless they have had time for the holes to fill up, and it is doubtful if they ever entirely recover.—*Boston Cultivator*.

ANOTHER ENEMY TO THE WHEAT CROP.

It is known to most of our readers that the wheat crop of this country has been well high ruined by the joint worm. We had supposed, when witnessing its ravages during the last two years, that no greater evil could befall the farmer, so far as his grain crop was concerned, than the visitation of the joint worm. But we discover this season another and a new enemy at work, which, should it increase as the joint worm has done, must prove more destructive to the grain crop than even the dreadful scourge we have mentioned. We are not skilled in entomology and cannot, therefore, dignify this new comer with one of those high sounding names which scientific men so much delight in—the length of which is usually in inverse proportion to the size of the thing named, but can only say that it is a little worm of about one-fourth of an inch in length and of a brown color, which gets into the cavity of the straw just below the head, and locating itself near the upper joint, feeds upon the straw until it cuts it in two. This gives the wheat the appearance of ripening from the head, which will be found to contain no grain. Unlike the joint worm it shows no preference for *wheat* over *rye*, but, on the contrary, is found most frequently in the latter grain. We saw to-day a crop of rye sensibly affected by it. We are told that it has occasionally been seen heretofore in this country, and if we are not mistaken, *this* is what was reported as *joint worm* last year in Fauquier. We have furnished a scientific gentleman with a specimen of the diseased wheat, and he will investigate the history and habits of the insect and can probably tell us what we are to apprehend from it.

This season seems to us prolific in insect pests. Our farmers have all the *plagues of Egypt* upon them at once. Their corn crop is injured by *cut and bore worm*, the wheat by *fly*, *joint worm* and this stranger, who has found

a "local habitation," but is still without a "name," and as for tobacco! there's fly, flea, cut worm, bore worm, bugs, grasshoppers and crickets, without limit. This is a *wormy* age we live in, and we know of nothing better for a man to do than to carry about with him a bottle of *McLane's Vermifuge* to protect himself against the *prevailing epidemic*.—*Charlottesville Advocate*.

From the Ohio Cultivator.

RED WEEVIL IN WHEAT.

Mr. Editor,—A few days since I stated to you that the fly had injured the wheat crop in this vicinity very extensively. I have now to state that the red weevil bids fair to destroy most of the balance. An insect has deposited its larva in innumerable millions on the grain. I have counted as many as eight or ten on a single berry. It is of a palish red color, not thicker than a cambric needle, and about a sixteenth of an inch in length.

We have two other varieties of weevil, known for some time past to this section, but this *red weevil* is a new comer among us. He first appeared last year, in the western part of the county where I reside; but did not then reach the eastern side of the Muskingum river.

I know very little about its habits or its history, or the extent of its power to injure. Where did this "red weevil" originate? What part of this State, or of the United States has it visited? What is the extent of the evils it inflicts upon the wheat crops? If you, *Mr. Editor*, or any of your readers are informed upon these subjects, it would be gratifying to me to be favored through your columns with the information.

A friend at my side says this weevil has been a regular visitant about Union county, Ohio, for some eight years past; that he usually satisfies himself with about half the crop, or less; but in some instances whole fields have been so destroyed as not to be worth cutting.

I discovered last year that when the grain was filled, and the skin or bran tolerably well matured, the weevil did not appear to have the power to injure it; but when it was immature and soft, they so drew away the substance of the grain for their own nourishment as to destroy it. From the immense numbers of weevil that are now deposited upon the fields around here, and the soft, imperfect state of the grain, I should judge that the destruction of the crops will be extensive. But in this I hope I may be mistaken. When the attack was made last year, the grain was in a more forward state.

C. SPRINGER,

Meadow Farm, Ohio.

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B. L. Johnson to January 1853	1 00
William G. Crenshaw to July 1854	1 00
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C. O. Lipscomb to July 1854	
Capt. G. A. Wood to July 1854	
William Hankins to July 1854	
William H. Eubank to July 1854	
Wyatt H. Pettus to July 1854	
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P. K. Wood to July 1854	
Joseph L. Watkins to July 1854	
Thomas B. Purcell to July 1854	
R. E. Knight to July 1854	
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J. D. Priddy to July 1854	
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Henry S. Mason to January 1854	1 00
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Willie Perry, Jr., to July 1854	1 00
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Dr. Archibald Graham to April 1854	1 00
Dr. W. S. Brockenbrough to Jan. 1854	1 00
C. J. Thompson to July 1854	77
Madison H. Effinger to July 1854	1 00
Robert Anderson to July 1853	2 00
George W. Richardson to Feb. 1854	1 00
Rev. A. L. Holladay to May 1854	1 00
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Isaac H. Carrington to April 1855	2 00		
Dr. R. N. Hudson to April 1854	1 00		
Merit P. Sledge to January 1854	1 00		
John C. Daniel to July 1854	1 00		
Wm. B. Millner to July 1853	1 00		
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B. W. Bailey to January 1854	1 00		
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Thos. W. Downer to July 1854	1 00		
B. Bridgeforth to January 1854	2 00		
E. T. Tayloe to January 1854	1 00		
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C. C. Baldwin to July 1853	1 00		
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Harrisonville, Baltimore Co., Md.

au—tf

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TO THE FARMERS AND AGRICULTURAL COMMUNITY OF VA.

THE subscriber is desirous to make known to the above, an article of manufacture of Chemical notoriety, namely, SUPER-PHOSPHATE OF LIME, allowed to be one of the most efficacious Manures ever yet adopted in this or any other country, for its well known properties of regenerating and fertilizing the barren and worn-out soil. Its first introduction was into England, some ten years since, when from its then pronounced magic effect, a patent right was granted to its inventor, the celebrated Professor Law, of London, who stands now unrivalled as one of the first Chemists of the day. Having had the honor of graduating under him, and together with some years of practical experience in the manufacturing of this article with him, gives a sufficient confidence to state that the A No. 1 of my present manufacture cannot be equalled in this vast continent, being the sole inventor and introducer of it into this country. Should there be a doubt as to its truthfulness, my Diploma, received from the New York American Institute, will fully attest of the correctness of my statement, together with a host of the highest testimonials from the Farming and Agricultural consumers of my Manure for the last twelve months while there.

I can also state with pleasure having received many kind letters from mere strangers to me, requesting of me to refer any one who may feel skeptical of the powerful influence it has over the most barren or useless land that can be found—in a great many instances, parties were dubious of buying more than some 50 or 100 pounds to make trial; the same parties now purchase in Tons, and feel proud in making it known to their surrounding farming neighbors, who seemed quite astounded at the crops produced by the application of this miraculous process, which enters into the composition of all plants, and the importance of invaluable constituent to the agriculturalist will be easily understood, when the reader is informed that no plant will grow upon a soil denuded of it. Phosphates of lime is being continually removed and abstracted from the soil, and taken up by the plants in solution for their nourishment, and unless such an equivalent be returned, diminution of fertility must naturally be the issue. I apprehend the efficacy of ground or crushed bones on the soil is well known to the American farmer.

I will presume to point out the advantage Super-phosphate of Lime has over bones. Bones are insoluble in water, and have first to be decomposed before they can be incorporated with the soil—such decomposition taking a long time. From authenticated writers and scrupulous experimenters, it has been acknowledged that twenty bushels of Super-phosphate of Lime, will have the desired effect of 100 bushels of unprepared bones. The reason of such fact is on account of its being in a state

of solution shortly after having been applied to the soil, and taken up by the plants, which derive their strength and growth from the soil in no other form.

The subscriber offers his manufactured Super-phosphate of Lime as a chemically pure and genuine article; a perfect Super-phosphate, with the addition of guano and other fixed salts, &c., only known to himself—containing ammonia and other constituents necessary to furnish to the soil that which it has been robbed of by previous growth. It is quite as effective as GUANO, but much more durable as a manure, and less volatile than any other.

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P. S.—My representative, Mr. J. P. O'NEIL, shall do himself the pleasure of visiting Virginia on a tour of business, when he shall be most happy to receive orders and impart such information as may be required of him relative to this matter—he shall also bring on with him a supply of Pamphlets, with full particulars, which will be found most essentially useful to the agricultural community.

PRICE—\$45 for 2,000 lbs. from the manufactory.

Williamsburg, L. I.

july—3m

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je—1y

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THIS machine is now offered to the public and warranted to be a good self-raking reaper. It is also believed to be a good mower, but not yet having been sufficiently tested in grass, (though it soon will be) it is not warranted to be equal to a machine made mainly or wholly to mow.

The raking apparatus is of novel and very simple construction, and not liable to derangement, and every farmer who has seen it in the harvest field, says it performs the raking better than a man can possibly do it.

Price of machines at Chicago, \$175, of which, \$75 must be paid on giving the order, \$50 upon successful trial, and \$50 in note payable 1st December.

The machines are thoroughly built and warranted.

Descriptive circulars, with cuts, sent to post-paid applications.

J. S. WRIGHT,

"Prairie Farmer" Warehouse, Chicago, June, 1852. July—3t

ANALYSIS OF SOILS, &c.

THE undersigned is prepared to execute the analyses of Soils, Guano, Marls, Plaster, &c. &c. at the Laboratory of the Virginia Military Institute. Packages may be forwarded through Webb, Bacon & Co. Richmond, or Echols & Pryor, Lynchburg.

Persons desiring further information will please address

WILLIAM GILHAM,

Prof. Chem. and Agriculture, V. M. I.
Feb. 1, 1852. Lexington, Va.

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THE subscriber offers for sale the following varieties of *pure blooded Fowls*, viz: COCHIN CHINA or CANTON FOWLS; BLACK, WHITE, BUFF and BROWN SHANGHAIS; CHITTAGONGS or GRAY SHANGHAIS.

The above are the largest and best variety of fowls bred in this country, and are from stock originally imported by the subscriber. Gentlemen, Poultry-keepers and others, desirous of procuring choice Poultry may depend upon the above stock being purely bred and warranted true to their name. Address

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Richmond, Nov. 1, 1852—1y

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Cotswold Rams, Ewes, Ram and Ewe Lambs from the best flocks in the United States. Also, Southdown Ram Lambs from fine flocks.

Shanghai Fowls from different importations, and as grown by Professor James M'Clintock, for which, I am the only Maryland agent.

Moor's Patent Premium Wheat Drills, on more accommodating terms, with the improvements.

Letters of inquiry and orders, post paid, will receive prompt attention.

MARTIN GOLDSBOROUGH,

Agent, Harrisonville, Baltimore Co., Maryland.
July—1f

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Live weight, 374, 309, 307, 285, 271, 254 lbs.
Dead " 269½, 213, 203, 201, 181, 160½ "

No. 1 being the heaviest sheep ever slaughtered in the United States.

Persons are invited to call and see for themselves, or communicate by mail to

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July—3t

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THE DAILY EXPRESS, published at Petersburg, Va. is the cheapest daily paper published south of James river, Virginia. It is devoted almost entirely to news matters of every description, and eschewing politics, may be emphatically styled a "Newspaper." Three hundred and twelve copies, which embraces the whole year (Sundays only excepted,) will be furnished at the unprecedented low price of four dollars per annum. Address

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J. W. RANDOLPH, Richmond, Virginia, has just published the *Plantation and Farm Instruction, Regulation, Record, Inventory and Account Book*, for the use of managers of estates, and for the better ordering and management of plantation and farm business, in every particular, by a Southern Planter. Order is Heaven's first law—*Pope*. Price \$2, or six for \$10; a larger edition for the use of cotton plantations, price \$2 50.

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There are extra sheets for monthly and yearly reports, for the use of those who do not live on their farms. The Book will be sent by mail free of postage to any one who will remit the price in money or postage stamps.

This Book is by one of the best and most systematic farmers in Virginia; and experienced farmers have expressed the opinion, that those who use it, will save hundreds of dollars.

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TO AGRICULTURISTS.

MORRIS & BROTHER have received the following valuable Books, pertaining to Agriculture:

Elements of Scientific Agriculture, or the connexion between Science and the Art of Practical Farming. This was the prize essay of the New York State Agricultural Society; by **J. P. Norton, M. A.**

Elements of Agricultural Chemistry and Geology; by **Jas. F. W. Johnston.**

American Agriculturist, for the Farmer, Planter, Stock Breeder, and Horticulturist; by **A. B. Allen;** numerous plates. The 8th and 9th volumes of this most valuable work are received, also complete sets. Every farmer should have this work.

American Farm Book, on Soils, Manures, Drainings, Irrigation, Grasses, Grain, Roots, Fruit, Cotton, Tobacco, Sugarcane, Rice, and every staple product of the United States.—This is a perfect farmer's library, with upwards of 100 engravings; by **R. L. Allen.**

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A Muck Manual for Farmers; by **S. L. Dana.**

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Farmer's Encyclopædia; by **Cuthbert W. Johnson.**

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Loudon's Gardening, for Ladies; by **A. J. Downing.**

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Fessenden's American Gardener.

American Fruit Book, with full instructions; by **S. W. Cole.**

Downing on Fruit Trees.

Theory of Horticulture; by **Lindley.**

Florist's Manual; by **H. Bourne;** 80 colored engravings.

Bridgman's Kitchen Gardener.

In addition to which, **Morris & Brother** have all of the late Works on Agriculture, Horticulture, and Raising Stock, of any celebrity.

Richmond, March 12, 1851.—1v

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ANALYTICAL LABORATORY

FOR THE ANALYSIS OF SOILS, &c.—The undersigned announces, that through the liberality of the Planters of the adjacent counties, there has been established, in connection with the Department of Chemistry in Randolph Macon College, an Analytical Laboratory, for the analysis of soils, marls, plaster, guano, minerals, &c., and for instruction in Analytical Chemistry. The Laboratory will be furnished with the most approved apparatus and choice re-agents, with every desirable facility. He has associated with him Mr. William A. Shepard, who was recently assistant to Professor Norton, in the Yale Analytical Laboratory, and who comes with ample testimonials of skill and capacity. Young men can pursue any studies in the College they may wish, while they are receiving instruction in the Laboratory. Copious written explanations will always accompany the reports of analysis. The charges for analysis and instruction will be moderate—the design being to make the Laboratory accessible to the people at large. Packages left with Messrs. Wills & Lea or Smith & Dunn, Petersburg, Virginia, will be forwarded, free of charge, to those who send them. For further information, address

CHAS. B. STUART,
Professor of Experimental Sciences, Randolph
Macon College, Va. oc—tl.

AN ESSAY ON CALCAREOUS MANURES,

BY EDMUND RUFFIN, a practical Farmer of Virginia from 1812; founder and sole editor of the Farmers' Register; Member and Secretary of the former State Board of Agriculture; formerly Agricultural Surveyor of the State of South Carolina, and President of the Virginia State Agricultural Society; fifth edition, amended and enlarged.

Published by J. W. Randolph, 121, Main street, Richmond, Virginia, and for sale by him and all other Booksellers; fine edition, 8vo., printed on good paper, and strongly bound, library style \$2; cheap edition, 12mo. \$1 25—copies sent by mail, post paid, to those who remit the price.

A large proportion of this publication consists of new matter not embraced in the preceding edition. The new additions or amendments serve to present all the new and important lights on the general subject of the work, derived from the author's later observation of facts, personal experience and reasoning founded on these premises. By such new additions the present edition is increased more than one-third in size, notwithstanding the exclusion of much of the least important matter of the preceding edition, and of all portions before included, that were not deemed essential to the argument and necessary to the utility of the work.

"This work is from a Virginia gentleman, whose contributions to agricultural science have already given an extensive popularity. Mr. Ruffin is a practical farmer, of great intelligence, and is eminently competent to impart information on the subject, which has for so many years engaged his attention."—*Methodist Quarterly Review*.

The Southern Planter, in speaking about the cultivation of Irish potatoes and liming, says:

"But for the details of that business, we would refer our correspondent to a book, which if he has not now, we beg for his own credit that he will get as soon as he goes to Richmond. We mean the final edition of the Essay on Calcareous Manures."

"The farmers of Virginia have just reason to thank both the author and publisher for this enlarged and improved edition of a most valuable book."—*Hon. Willoughby Newton*. je—tf

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HAVING employed a competent teacher to educate my children, I wish to get five or six boys, not more than twelve years old, as boarders. The whole number of pupils will not be allowed to exceed twelve or fourteen. The teacher is a good classical and mathematical scholar and a gentleman in whose capacity, fidelity and high character I have entire confidence. The school will commence the first of October and terminate the middle of August, with a short recess at Christmas.

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FRANK: G. RUFFIN,
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